AJE PI Specification

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Public Interface Registration

The Public Interface (PI) Batch Job Posting is a batch only method of transmitting your jobs to America's Job Exchange. It is intended for employers who want to list large numbers of job openings on a regular basis.

This service is intended for those employers who:

- Use an automated human resource computer system.
- Have programming staff that supports the human resource computer system.

To help you determine if Public Interface is appropriate for you, have your technical staff review the specifications in "Public Interface Batch Submission" on page 3 before submitting your PI application.

Accessing Public Interface

To sign up for Public Interface you will need to be a registered AJE Employer and logged in to your Account. Once you have logged in click on the **Are you interested in learning more about posting your job by using our bulk submission interface? Find out more!** hyperlink directly beneath the account menu on the left of the My Account screen. The AJE Public Interface (PI) Job Submission Method screen appears.

Registering for Public Interface

1. On the AJE Public Interface (PI) Job Submission Method screen, click the **YES** button to continue the registration process. The AJE Public Interface (PI) Supplementary Registration screen appears.
   Or
   Click the **NO** button to return to the My Account screen.
   Note: Fields marked with a asterisk (*) are required.

2. Click on the **Please enter an e-mail address that will receive the PI transmission reports** field, and type an e-mail address.

3. Click on the **Enter the contact name of a technical representative** field, and enter a name.

4. Click on the **Technical contact e-mail** field, and type an e-mail address for the technical contact.

5. Click on the **Technical contact phone number** field, and type a phone number with area code for the technical contact.

6. The ***Company PI contact name***, ***PI contact name***, ***PI contact e-mail***, and ***PI contact phone*** fields are copied from the Employer registration information. These fields can be changed for PI without affecting the employer registration information.

7. Click on the **If you know your NAICS Code, enter it here** field, and type your NAICS Code if you know it.
   Or
   Click on the **If you do not know your NAICS Code, enter a brief description of what your company does here** field, and type a description up to 750 characters including spaces and punctuation.

8. Click the **SAVE** button. The AJE Public Interface (PI) Registration Confirmation screen appears. You should receive confirmation from America's Job Exchange Service Center in approximately three working days.

Public Interface Batch Submission

This section describes America's Job Exchange Public Interface. The Public Interface (PI) is a bulk job transfer system that allows employers to send their jobs directly to the America's Job Exchange database instead of using the online interface.

You can use this documentation to find out what kind of files to create, how to send them to us, how to test them for compliance, and how to be accepted to "go live" and have your jobs put into our database. It also shows you how to keep tabs on your PI processing to make sure it always works the way you intend.

You can also access this Help document directly (from outside America's Job Exchange) at http://www.americasjobexchange.com/help/employer/Employer37.html. Copy this Uniform Resource Locator (URL), paste it into your browser's URL field, and display the page. You can add this URL to your list of bookmarks or favorites for easy reference.

Note: All AJE employers are encouraged to review the Public Interface documentation to determine whether or not they want to use this option. You must register before implementing any of the following instructions. See Public Interface Registration for instructions on how to register as a PI employer.

Helpful Links

Note: If you have questions or problems, please e-mail us at customercare@americasjobexchange.com.

- The PI Specification document begins with Getting Your Files Ready. This document contains information for submitting jobs by batch through the Public Interface.
- Tips and Techniques lists helpful information about Public Interface.
- The SSONET Job Code List for Public Interface lists the SSONET Job Codes in alphabetic order.

- The SSONET Job Code List by Occupational Family for Public Interface lists the SSONET Job Codes by family.
- The State and Territory Codes for Public Interface lists the state and territory codes available for use by Public Interface.
- The Country Codes lists the country codes PI employers can use.
- The Education Codes for Public Interface lists the education codes available to PI employers.
- The Sample PI Job File contains an example of a job file.
- The Sample PI Office File contains an example of an office file.

Executive Summary

Who Should Use PI

Public Inteface (PI) is designed for large employers who keep a database of all the open jobs in their company. PI makes it possible for them to submit those jobs to America's Job Exchange all at once.

What You Need to Do

You send a “snapshot” of your database to us. Then we duplicate that snapshot in our database, making your job openings available to all the visitors on America's Job Exchange.

PI requires you to create two files, one to hold all the job information (job title, job description, perhaps salary information or training required, etc.) and the other to hold all corresponding contact information (how to apply for jobs, who to contact, etc.).

We then use the files you created to update our database on a nightly basis. Each time you want to update your job information on AJE, you send a complete snapshot of your jobs and corresponding contact information. PI then compares the new snapshot to the previous snapshot, and automatically calculates which records to add, change, delete, or leave the same.

We recommend that you plan to send us a new update at least once a week. If you have a large number of jobs, you should send them daily.

How It Works

PI users will use File Transfer Protocol (FTP) to send us their files. All PI users have an account on our FTP server. Once the files are transferred, we will process them. If we receive the files before midnight Eastern Time, we will process them and post the jobs by 8:00 am Eastern Time that morning.

There is no need for you to supply action codes such as add, update, and delete. The system compares the records in the files that you submit with the records you previously submitted.

- If a record exists in your current file that was not submitted in a previous file, it is added to our database.
- If a record existed in your previous file and does not exist in your current file, it is deleted from our database.
- If a record exists in both your current file and in your previous file, the contents of each record are compared.
  - If the records have changed from the previous file, the record in our database is updated.
  - If the records match the previous and current submissions, there is no change to our database.

What You Need to Supply

Each PI user supplies us with two text files. For a full description of the contents of these files, see Job File and Office Contact File for more information. They must have the following (case-sensitive) names.

pi_jobs.dat

Contains all jobs that you have in your database. Each job corresponds to one Job Record. Each job can have one or more positions available.

pi_offices.dat

Office Contacts tell job applicants how to contact you to apply for a job. The Office Contact ID field is used to link each job with the hiring office or contact person associated with that job. Usually, you will have many jobs and only a few office contacts. Because each hiring office or contact person handles more than one job, each office or contact person would get one office contact record, and each job that person or office handles would refer

to that office contact record. See Office Contact File for more details on how to organize your office contacts.

Using Test Mode

From time to time you may want to test your files without affecting the database. To do this FTP your files with the prefix test onto the file names. Name the files testpi_jobs.dat and testpi_offices.dat.

Another method is to copy your files to run both in production and test mode. You would “FTP” your files in the same way you would for production. To use test mode, you must copy your files to the test area through the PI Resources website.

See Testing to Production for more information.

Getting Your Files Ready

The following sections explain what you should put into each of your two data files, how to format the files, and the relationship between the files. Please be sure to read each section. Submitting correctly formatted jobs can mean a great difference in the amount of time your testing will take, and improve the response those jobs get in the America's Job Exchange searches.

Job File

We'll define what goes into a job file first, then how to format it. For formatting requirements see Job File Formatting Requirements.

A Job File (**pi_jobs.dat**) is made up of Job Records listed one after another. You must separate each record with two carriage returns or line feeds. Each Job Record describes one job, and contains all the information about that job except how to apply.

Note: See Office Contact File for a description of this file. See How Office Contacts and Jobs Are Linked for information on linking Job Records to Office Records.

Job Records are made up of 23 fields of data that describe a particular job. See Table of Field Specifications - Jobs for correct field order, length, and required status.

What Makes Up a Job—Required Items

All of the following fields are required for a job record. They must be present and filled with valid information, or the job record will not pass our validation rules. See Table of Field Specifications - Jobs for a listing of the fields and the correct order.

Please note some fields are used by different types of search options. Incorrect information in any of these fields will lead to incorrect classification for your jobs and incorrect search results for job seekers. To ensure best results, we encourage attention to detail when you post your jobs.

- **Origination Job ID**
  Sometimes referred to as "Requisition number" or Job ID - Unique identifier for this job. Each job must have a unique identifier and this will remain for the life of the job. Please use the ID or requisition number from your own job tracking records for this field. For example, you might use the primary key from your job database for this field.

  Once you have assigned a Job ID to a job, please do not change it for the life of that particular job. If you change a job's ID, it is recognized as a new job. This makes it impossible for applicants who have book marked the original job to ever return to it. Also, please avoid reusing Job ID's for different jobs.
- **Office Contact ID**
  ID of the Office Contact Record associated with this job. Use this field to link this job with the office the applicant should contact to apply for the job. More than one job can share the same Office Contact Record. See Office Contact File for more details.
  Note: The Office Contact ID in each job record must match the Office Contact ID in one of the Office records exactly for the jobs to process.
- **Job Code**
  SSONET Occupation code also known as AOC, that classifies the job. Use this code to classify this job correctly for our "Job Title Search." If you do not use the correct code, your job will not show up in the right

category in search by occupation. Therefore, we encourage you to choose these codes carefully so that your jobs get the exposure you'd like on our site. You can choose job codes from the SSONET Job Code List for Public Interface or from the SSONET Job Code List by Occupational Family for Public Interface.

- **Job Title**
  Job Title for the position this job record advertises. This field is searchable using the "Keyword Search," and is among the first things a job seeker notices about the job after finding it in a search.
- **Country**
  Country where the job is located. This field is searchable using the "Location Search" options of our regular job searches. This field is a two character abbreviation. See Country Codes for a list of codes.
- **Position Count**
  Number of open positions for this job. For example, if you're hiring three night watchmen in the same location, you may list it as one job with three positions available by putting a value of **3** in the position field.
- **Duration**
  Duration of the job. This field is searchable in a job search using the "Additional Search Options." This field accepts a number between 1 and 8, and that number is converted to the job classification and position type shown in the following table:

Duration Value Conversion Table

Code	Description	Job Classification	Position Type
1	Full Time Short (More than 30 hrs/wk, less than 3 days)	Full Time	Temporary
2	Full Time Temporary (More than 30 hrs/wk, less than 6 months)	Full Time	Temporary
3	Full Time Regular (More than 30 hrs/wk, more than 6 months)	Full Time	Permanent
4	Part Time Short (Less that 30 hrs/wk, less than 3 days)	Part Time	Temporary
5	Part Time Temporary (Less than 30 hrs/wk, less than 6 months)	Part Time	Temporary

Duration Value Conversion Table

Code	Description	Job Classification	Position Type
6	Part Time Regular (Less than 30 hrs/wk, more than 6 months)	Part Time	Permanent
7	Full Time Seasonal (More than 30 hrs/wk)	Full Time	Temporary
8	Part Time Seasonal (Less than 30 hrs/wk)	Part Time	Temporary

- **Description**
  Must describe the specific responsibilities of the job. Please note that the job description is searchable. This field can contain any information about the salary, benefits, license, training, or education requirements for the job. You should also put this information in the appropriate fields, described in What Makes Up a Job—Required Items so that it can be found in a search. The description should not contain contact information. Contact information should be recorded in the corresponding Office Contact record.

  The description can be up to 4000 characters, and can include spaces, new lines, and most printable characters. We suggest that you do not use double quotes; however, if you do, the escape character, a back slash: \, must precede the quote character. See Sample File - Jobs for an example. Do not include any HTML tags or formatting in this (or any) field. On the Job Exchange site, they will be treated as regular text with the HTML tags showing like regular words in the job description. It will not show up as you intend. We have provided an example of just how a job with HTML tags would look to a prospective job applicant.

What Makes Up a Job—Optional Items

- **Job Location Information**
  City, State, and ZIP are searchable through the “Select a Location Option” on the AJE site. You can identify jobs without providing a specific location. See “Examples of Job Location Fields” below for various location options. You can also use these options to identify a position or positions with multiple locations.
  - **Street Address 1**—optional field

- **Street Address 2**—optional field
- **City**—Optional field. For state-wide and nation-wide jobs, leave this field blank. You must provide a ZIP code and a state when this field is used, and the country code is **US**.
- **State**—For nation-wide jobs, leave this field blank. For state-wide jobs, provide a state code without a City and ZIP. Use the state code **ZZ** if you specify any country other than the United States. The state code must be a valid, two-letter state code if the country code is **US**. Military State codes are considered US States and must be paired with a Country code of US. See State and Territory Codes for Public Interface for a list of codes.
- **ZIP**—Only required if City is present and Country is US. For the country of US, use only valid, United States ZIP codes as either a five-digit code or ZIP+4. For all other countries, this field can accept any format postal code up to 10 positions.
- **Region**—Not used in newest version of America's Job Exchange. Please make a place holder for this field.
- Examples of Job Location Fields
  - City, State, ZIP code, Country
  - State,Country (state-wide jobs)
  - City, State (State only required if country is US.), Country
  - City, ZIP code (ZIP code only required if country is US.), Country
  - No city, no state, no ZIP code, Country (nation-wide job)
- **Salary Unit**
  Required only if Minimum or Maximum Salary is present.
  This indicates how the minimum/maximum salary is specified (per hour, per week, etc.) This field accepts a number between 1 and 5 that represent the following values:
  1 per Hour
  2 per Day
  3 per Week
  4 per Month
  5 per Year
- **Minimum Salary**
  Minimum salary for the position in U.S. dollars. This figure must be

less than Maximum Salary, and must be less than $500 per hour, or $1,040,000 per year. Enter amounts as a one- to seven-digit dollar amount. Do not use commas or letters. Decimals should not be used unless cents are part of the salary.

- **Maximum Salary**
  Maximum salary for the position in U.S. dollars. This field must be more than Minimum Salary, and must be less than $1,040,000 per year. Enter amounts as a one- to seven-digit dollar amount. Do not use commas or letters. Decimals should not be used unless cents are part of the salary.
- **License(s)**
  Any licenses that may be required or preferred for the job. The License field is searchable.
- **Training**
  Any training that may be required or preferred for the job. The Training field is searchable.
- **Experience**
  Number of months experience required or preferred for the job. You can specify a one- to four-digit number to indicate number of months. Experience, less than 12 months will convert to entry level, 12 to 179 months will convert to mid-career, and greater than 180 months will convert to senior level.
- **Education**
  Number of years education or degree required or preferred for the job. You can specify education as a one- to three-letter code representing a degree or as a two-digit number representing years of education. See Education Codes for Public Interface for a list of codes.
- **Hours Per Week**
  Number of hours per week the position requires.
- **Shift**
  Indicates the time of day of the job. This field accepts a number between 0 and 3 that represent the following values:
  0 Unspecified
  1 First shift
  2 Second shift
  3 Third Shift

Job File Formatting Requirements

You must comply with the following requirements when building your Job file.

- A Job File is a text file that consists of one or more Job Records listed one after another. Each record, including last record must be separated by two carriage returns or line feeds. See Sample PI Job File for an example.
- A Job Record consists of 23 consecutive fields. See What Makes Up a Job—Required Items for a description and see Table of Field Specifications - Jobs for the order of the fields.
- Each field must be enclosed in standard double quotes (") and separated from the next field by a comma.
- Empty fields must be represented as empty quotes with no spaces between the quotes ("").
- Two carriage returns or line feeds must follow the last record in the file.
- See Table of Field Specifications - Jobs for an example of the content checks that fields must pass. See What Makes Up a Job—Required Items for an example of the content descriptions.
- All fields must be standard ASCII characters. No control characters are allowed.

Table of Field Specifications - Jobs

#	Req	Title	Type	Len	Expected Values
1	R	Origination Job ID	AN	1 - 40	Unique Alphanumeric value
2	R	Office Contact ID	AN	1 - 40	Must match an Office Contact ID established in the Office Contact file. See Table of Field Specifications - Office Contacts.
3	R	Job code	I	7	Valid 7-digit SSONET Job Code. See What Makes Up a Job—Required Items
4	R	Job Title	I	1 - 120	Text string

Table of Field Specifications - Jobs

#	Req	Title	Type	Len	Expected Values
5		Street Address 1	T	1 - 80	Text string
6		Street Address 2	T	1 - 80	Text string
7	*	City	T	1 - 40	Text string
8	*	State	T	2	Valid two-letter U.S. state or territory abbreviation. See What Makes Up a Job—Optional Items
9	*	ZIP	T	5 or 10(US) up to 10(non-us)	Valid Postal Code see What Makes Up a Job—Optional Items
10	R	Country	T	2	Valid two-letter country abbreviation. See What Makes Up a Job—Required Items
11		Region	I	3	Populated by KGJ (Katrina General Jobs) or (KRJ (Katrina Recovery Jobs).
12	*	Salary unit	I	1	Value of 1 - 5, see What Makes Up a Job—Optional Items
13		Minimum Salary	N	1 - 10	Value of 0 - 1040000.00. Use a period with two decimals only if cents are part of the salary.
14		Maximum Salary	N	1 - 10	Value of 0 - 1040000.00. Use a period with two decimals only if cents are part of the salary.
15		License	T	1 - 60	Text String
16		Training	T	1 - 60	Text String
17		Experience	I	1 - 4	Value of 1 - 1200 (in months)

Table of Field Specifications - Jobs

#	Req	Title	Type	Len	Expected Values
18		Education	AN	1 - 3	2-digit number (total years) or 1 - 3 character degree. SeeWhat Makes Up a Job—Optional Items
19	R	Position Count	I	1 - 3	Value of 1 - 500
20		Hours Per Week	I	1 - 3	Value of 0 - 168
21	R	Duration	I	1	Value of 1 - 8, see What Makes Up a Job—Required Items
22		Shift	I	1	Value of 0 - 3, see What Makes Up a Job—Optional Items
23	R	Description	T	3 - 4000	Text String

Required Column Values

R - Always required. See What Makes Up a Job—Required Items for a description of content
* - Conditionally required, see field descriptions in What Makes Up a Job—Optional Items for more information.

Type Column Values

AN - alphanumeric
I - integer
N - number
T - text

Sample File - Jobs

A job file may look something like the sample job file we provide. See Sample PI Job File.

Note: Each job record has a unique Origination Job ID (the first field). You must have two carriage returns or line feeds between job records. The job description field will exactly reflect the formatting you enter; note the use of white space and escaped quotes in the formatting of the job description only. You must have two carriage returns or line feeds at the end of the file.

Office Contact File

We'll define what goes into an office contact file first, then how to format it. For formatting requirements, see Office Contact File Formatting Requirements.

An Office Contact File (**pi_offices.dat**) is made up of Office Contact Records listed one after another. The Office Contact Records are used to show applicants how to contact you to apply for the jobs. Each Office Contact Record is associated with one or more jobs.

What Makes Up an Office Contact - Required Items

- **Office Contact ID**
  Unique ID for the Office Contact Record. See How Office Contacts and Jobs Are Linked for more details on how to use this field to link your hiring offices to their jobs.
- **Company Name**
  Name of the Company to be contacted for this job. This name should be consistent with any mail, phone, fax, or e-mail information that is provided.
- **Contact Type**
  A non-zero integer representing the sum of applicable methods of contact for this job. Each contact option is represented by a particular integer. These mappings are as follows:
  - **1** Contact by mail
  - **2** Contact by fax
  - **4** Contact by phone
  - **8** Contact by e-mail
  - **16** Contact by primary URL

Any combination of contact methods can be applied to an office. For example:

- To contact only by phone (4) use 4.
- To contact only by phone (4) and e-mail (8) use 12 (4 + 8 = 12).
- To contact only by e-mail (8) and primary URL (16) use 24 (8 + 16 = 24).
- To contact by all methods use 31 (1 + 2 + 4 + 8 + 16 = 31).

Please supply only valid contact information - all the contact information you provide will be displayed on the AJE web site with the job. Also realize that if you choose 31, you must supply valid information for every office contact field.

Please see Field Dependencies Based on Contact Type for more information about which fields are required based on the contact type values you specify.

What Makes Up an Office Contact - Optional Items

The value of the contact type field determines which, if any, of the following fields are required.

- **Mail Contact Information** - This information must be provided if you have specified “contact by mail” for the office contact record.
  - **Street Address** 1
  - **Street Address 2** (Optional)
  - **City**
  - **State** - Valid 2-char US state or territory abbreviation. See State and Territory Codes for Public Interface for a list of codes.
  - **ZIP Code** - If Country (below) is specified as US, this field must be a valid United States ZIP code, as either a five-digit code or ZIP+4. For all other countries, this field can accept any format postal code up to 10 positions.
  - **Country** - Two-character code for the country where the contact office is located. See Country Codes for a list of codes.
  - **Mail Contact** - Name of contact person for mail address, (ATTN).

- **Phone Contact Information** - This information must be provided if you have specified “contact by phone” for the office contact record.
  - **Phone Number** - Phone number for contact by phone option. Format NNN-NNN-NNNNxNNNN (extension optional)
  - **Phone Contact** - Name of person for phone contact. (Optional)
- **Fax Contact Information** - This information must be provided if you have specified “contact by fax” for the office contact record.
  - **Fax Number** - Fax number for contact by fax option. Format NNN-NNN-NNNN.
  - **Fax Contact** - Name of person for fax contact. (Optional)
- **E-mail Contact Information** - This information must be provided if you have specified “contact by e-mail” for the office contact record.
  - **E-mail** - e-mail address for applicant to apply for job.
- **Primary URL Contact Information** - This information must be provided if you have specified “contact by primary URL” for the office contact record.
  - **Primary URL** - Primary URL for applicant to apply for job. Must be a fully qualified URL, including http:// or https:// or other valid prefix.
  - **Secondary URL** - Not used in newest version of America’s Job Exchange. Please make a place holder for this field.

Dependencies Based on Contact Type

The Table Field Dependencies Based on Contact Type shows which fields are required or recommended for any particular value of contact type. A mail contact is always required for the mail contact type; a phone contact is always required for phone contact type; but a Fax contact is only recommended for Fax contact type.

- The **Value** column represents the value of the Contact Type field.
- The **Mail** column represents Mail Contact, Street Address 1, City, State, ZIP, and Country.
- The **Fax** column represents Fax Contact and Fax Number.
- The **Phone** column represents Phone Contact and Phone Number.
- The **E-mail** column represents E-mail address.

- The **Pri URL** column represents Primary URL address.

Field Dependencies Based on Contact Type

Value	Mail	Fax	Phone	E-mail	Pri URL
1	Y	-	-	-	-
2	-	Y	-	-	-
3	Y	Y	-	-	-
4	-	-	Y	-	-
5	Y	-	Y	-	-
6	-	Y	Y	-	-
7	Y	Y	Y	-	-
8	-	-	-	Y	-
9	Y	-	-	Y	-
10	-	Y	-	Y	-
11	Y	Y	-	Y	-
12	-	-	Y	Y	-
13	Y	-	Y	Y	-
14	-	Y	Y	Y	-
15	Y	Y	Y	Y	-
16	-	-	-	-	Y
17	Y	-	-	-	Y
18	-	Y	-	-	Y
19	Y	Y	-	-	Y
20	-	-	Y	-	Y
21	Y	-	Y	-	Y
22	-	Y	Y	-	Y
23	Y	Y	Y	-	Y
24	-	-	-	Y	Y
25	Y	-	-	Y	Y
26	-	Y	-	Y	Y
27	Y	Y	-	Y	Y
28	-	-	Y	Y	Y

Key: Y = YES, - = No

Field Dependencies Based on Contact Type

Value	Mail	Fax	Phone	E-mail	Pri URL
29	Y	-	Y	Y	Y
30	-	Y	Y	Y	Y
31	Y	Y	Y	Y	Y

Key: Y = YES, - = No

Office Contact File Formatting Requirements

You must comply with the following requirements when building your Office Contact file.

- An Office Contact file is a text file that consists of one or more Office Contact Records listed one after another each followed by two carriage returns or line feeds from the next including the final record. See Sample File - Office Contacts for a sample.
- An Office Contact Record consists of 17 consecutive fields. See What Makes Up an Office Contact - Required Items for a description. See Table of Field Specifications - Office Contacts for the order or the fields.
- Each field must be enclosed in standard double quotes (") and separated from the next by a comma.
- Empty fields must be represented as empty quotes with no spaces between the quotes ("").
- Two carriage returns or line feeds must follow the last record in the file.
- See Table of Field Specifications - Office Contacts for an example of the content checks that fields must pass. See What Makes Up an Office Contact - Required Items for an example of the content descriptions.
- All fields must be standard ASCII characters. No control characters are allowed.

Table of Field Specifications - Office Contacts

#	Req	Title	Type	Len	Content Check
1	R	Office Contact ID	AN	1 - 40	Unique Alphanumeric value
2	R	Contact Type	I	1 - 2	Value of 1-31, see What Makes Up an Office Contact - Required Items
3	R	Company Name	T	1 - 80	Text String
4	*	Street Address 1	T	1 - 80	Text String
5		Street Address 2	T	1 - 80	Text String
6	*	City	T	1 - 40	Text String
7	*	State	T	2	Valid two-letter US state or territory abbreviation. See What Makes Up an Office Contact - Optional Items
8	*	ZIP Code	T	5 or 10(US) up to 10(non-US)	Valid postal code What Makes Up an Office Contact - Required Items
9	*	Country	T	2	Valid two-letter country abbreviation. SeeWhat Makes Up an Office Contact - Optional Items
10	*	Mail Contact	T	1 - 40	Text String
11	*	Phone Number	T	10 - 17	Digits and hyphens only, see What Makes Up an Office Contact - Required Items
12	*	Phone Contact	T	1 - 40	Text String
13	*	FAX Number	T	10 - 12	Digits and hyphens only, see What Makes Up an Office Contact - Required Items
14	*	FAX Contact	T	1 - 40	Text String

Table of Field Specifications - Office Contacts

#	Req	Title	Type	Len	Content Check
15	*	E-mail Address	T	2 - 80	Valid e-mail format. See What Makes Up an Office Contact - Optional Items
16	*	Primary URL	T	4 - 1000	Valid URL format,What Makes Up an Office Contact - Required Items
17	*	Secondary URL	T	2 - 200	Not used in newest version of America's Job Exchange. Please make a place holder for this field.

Required Column Values

R - Always required. See What Makes Up an Office Contact - Required Items for a description of content
* - Conditionally required, see field descriptions in What Makes Up an Office Contact - Optional Items for more information.

Type Column Values

AN - alphanumeric
I - integer
N - number
T - text

Sample File - Office Contacts

An office contact file may look something like the sample office contact file we provide. See Sample PI Office File.
Note: Each office contact record has a unique Office Contact ID (the first field). You must have two new lines or one blank line between office records. You must have a blank line at the end of the file.

How Office Contacts and Jobs Are Linked

You may wish to skim Job File and Office Contact File before reading this section.

Each Office Contact Record has a unique ID, called its Office Contact ID. Each Job Record has a field also called Office Contact ID. To link a job to a particular office, place the Office Contact ID of the chosen Office Contact Record into the Office Contact ID field for the Job Record. Then, when the applicant views this job, the office contact information from its associated Office Contact Record will be shown. You can reference the same Office Contact Record for many jobs.See Single Hiring Office.

Single Hiring Office

Some employers have only one office contact as their hiring office. In this case, they would have one office contact record, and that office contact record would have an Office Contact ID of “1.” Then since all of their jobs are handled by that office, each *Job* record would have an Office Contact ID of “1” as well.

Several Hiring Offices

Some larger companies, however, may have three or four hiring offices in different areas of the country, and each office is responsible for a number of jobs. In this case, there would be a separate Office contact record for each office, and each office contact record would need its own Office Contact ID.

A popular way of doing this is to assign the three offices the IDs “1,” “2,” and “3.” Then all the jobs that belonged to office 1 would also have an Office Contact ID of “1.” Similarly, all the job records that belonged to office 2 would have an Office Contact ID of “2,” and the job records for office 3 would have an Office Contact ID of “3.”

Some companies have a unique URL for each job. In this case, the company finds it easier to assign an Office Contact ID that is the same as the corresponding Job ID. For example, a job record with a Job ID of "1234" would be linked to an Office Contact record with an Office Contact ID of "1234".

Descriptive Office Contact IDs

You are not limited to 1, 2, 3, 4, etc. for Office Contact IDs. Some employers choose to use the 40 alphanumeric characters allowed in this field to create a descriptive Office Contact ID, for example “MidwestHiringOffice1.”

Remember to use only letters and numbers, and **no** spaces, punctuation, or special characters.

Separating by Other Criteria

If separating by office does not meet your needs, you may wish to separate your office contact records by contact person, department, or other criteria. For example, let's say you have three people in your staffing office, each of whom handles jobs for a different department. Terry White is the contact for all office jobs, Jamie Young is the contact for all maintenance jobs, and Pat Santo is the contact for hiring drivers. You may then wish to have three office contact records, one for each person/department, like this:

```
"Maint","1","Our Company Name","570 Malden Plaza",
"Suite 106","Mattydale", "NY","13201","US","Jamie Young",
"","","","","","",""

"Office","1","Our Company Name","570 Malden Plaza",
"Suite 106","Mattydale","NY","13201","US","Terry White",
"","","","","","",""

"Drive","1","Our Company Name","570 Malden Plaza",
"Suite 106","Mattydale","NY","13201","US","Pat Santo",
"","","","","","",""
```

Testing to Production

The first part of this section contains instructions for how to test your data files, and defines the various errors you may encounter during testing. The second part tells you the steps to take to then have your jobs posted automatically to America's Job Exchange.

Testing Phase

How to Test Your Files

Once you have a PI account with America's Job Exchange, you must go through the following testing procedure to prepare to submit jobs through the Public Interface.

1. Prepare your **pi_jobs.dat** and **pi_offices.dat** files according to the instructions in this document. The filenames are case sensitive.

2. FTP both files to your account on the FTP server. If you do not remember your username or password, contact PI Help.

3. Go to the Public Interface Resources web site. Copy your file(s) to the test file area to be processed. The process will run automatically, and depending on the file size, the results should be available within an hour. (Normal test processing occurs between the hours of 8AM and 10PM EST daily. These times may fluctuate due to system maintenance or a long-running production submission.)

4. Follow the instructions on the web site to view the test results. For a closer look at the individual records in your file, use the Diagnostic Tool on the web site.

5. If all the tests return successful results, you are ready to move to the production phase. If you encounter any errors at all, examine your results and begin the testing process again with step 1.

Note: Before we can consider your account for production, you must be sure that your actual files pass these tests. Many users go through the testing phase using small test files. While this is a good way to be sure you are providing the right format, it does not verify that the contents of your data files will pass our content checks. Your final tests, before asking to go into production, should be run on the real job/office contact files you would like run in production.

Production Phase

How to "Go Live"

1. Successfully complete the Testing Phase correcting all errors.

2. Transmit and test files that are ready for production.

3. Contact PI Help and request to be switched from testing to production.

4. If files have been successfully tested, your jobs will be processed on the nights you transmit and will appear on the AJE web site the morning after you submit them.

Note: If your company uses one userid for several departments and mulitple people upload different files, whichever file is in place at the time DX runs will determine the adds/changes and deletes for that day. Eash submissions overrides the existing files on the server. It is possible that if one set of files are uploaded in time to run, another set uploaded after the dx process was started will run the next night and there will be a complete replacement of the jobs in the DB.

5. Once you have been successfully converted to Production status, you should transmit your **pi_jobs.dat** and **pi_offices.dat** files at least once a week. If you have a large number of jobs, you should transmit daily. We will pick up the changes automatically at midnight Eastern Time.

You will only need to visit the Public Interface Resources web site again if you want to view the reports. These reports are e-mailed to you anytime you send us new data files. However, if you change the way you generate your data files, we do suggest that you run a test submission with the files before we run our processing that night.

Job and Office File Processing

If you have an active Public Interface account, you can test your Job and Office files online to ensure they will run properly.

Accessing Public Interface Resources

1. Log into AJE. The My Account screen appears.
   Note: You must have a valid employer account and be signed up for Public Interface. Go directly to Logging into AJE at www.americasjobexchange.com/help/employer/Employer8.html and Public Interface Registration at www.americasjobexchange.com/help/employer/Employer35.html for additional information.

2. Click on the **Access Public Interface Resources** hyperlink directly beneath the account menu on the left of the My Account screen. The Public Interface Resources screen appears.

Results & Errors

Displays (or downloads) the results and any errors detected during the processing of your most recently submitted job and office files. For a production file, the results will be displayed after the nightly run. For a test file, it may be a few minutes before the results are available in the tool.

1. Under the heading Results & Errors, for Production, click **View Prod** to view the results of your processing. For Test, click **View Test** to view the results of your processing. The error message from the file appears on your screen.
   Or
   To download the results of your processing, click **Download Prod,** for production or click **Download Test**, for test.

2. Click on the **Back** button to return to the PI Resources screen.

Diagnostic Tool

The Diagnostic Tool shows you individual records so you can closely examine records that generated errors in the validation stage.

Viewing a Job File Using the Diagnostic Tool

1. Under the heading Diagnostic Tool, click **View Job Records** to view your job file from test, or click **View Prod Job Records** to view your job file from production.. The file appears on your screen.

2. To view records, either select next/previous navigation or type in the ID of the record.

3. Click on the **Back** button to return to the PI Resources Screen.

Viewing an Office File Using the Diagnostic Tool

1. Under the heading Diagnostic Tool, click **View Test Office Records** to view your office file from test, or click **View Prod Office Records** to view your office file from production. The file appears on your screen.

2. To view records, either select next/previous navigation or type in the ID of the record.

3. Click on the **Back** button to return to the PI Resources screen.

Copying Production Files to Test

These functions copy your most recently FTP'd files from the FTP server into the test area so that you can test them. After you copy the files, the system will parse and validate them automatically. This action may take several minutes.

Copying Job Files

1. Under the heading Copy Production Files to Test, click **Copy Job File to Test**. The Copy Files Confirmation screen appears with the message "Are you sure you want to copy the production files to test?"

2. Click the **CANCEL** button. The Public Interface Resources screen reappears.
   Or
   Click the **CONTINUE** button. The Public Interface Resources screen reappears with the message "File copied from production-mode to test-mode." displayed.

Copying Office Files

1. Under the heading Copy Production Files to Test, click **Copy Office File to Test**. The Copy Files Confirmation screen appears with the message "Are you sure you want to copy the production files to test?"

2. Click the **CANCEL** button. The Public Interface Resources screen reappears.
   Or
   Click the **CONTINUE** button. The Public Interface Resources screen reappears with the message "File copied from production-mode to test-mode." displayed.

Copying Both Job and Office Files

1. Under the heading Copy Production Files to Test, click **Copy Both Files to Test**. The Copy Files Confirmation screen appears with the message "Are you sure you want to copy the production files to test?"

2. Click the **CANCEL** button. The Public Interface Resources screen reappears.
   Or
   Click the **CONTINUE** button. The Public Interface Resources screen reappears with the message “File copied from production-mode to test-mode.” displayed.

Quick Reference

Transferring Files

- FTP server
  ftp.americasjobexchange.com
- Data File Names
  Both files should be generated and submitted each time for production submissions.
  Job File: pi_jobs.dat (case sensitive)
  Office Contact File: pi_offices.dat (case sensitive)

  Use the "test" prefix on the file names when only submitting for test. Job File: testpi_jobs.dat (case sensitive) Office Contact File: testpi_offices.dat (case sensitive).

Public Interface Resources

You must be logged in as an AJE PI Employer before you can access diagnostics, reports, and copy files to test.

Additional Appendices

You can find additional information and helpful lists of codes in the following documents:

- SSONET Job Code List for Public Interface
- SSONET Job Code List by Occupational Family for Public Interface
- State and Territory Codes for Public Interface
- Country Codes
- Education Codes for Public Interface
- Sample PI Job File

- Sample PI Office File

Tips and Techniques

Data Files, Records, and Errors

Some of our job titles do not match the SSONET Code titles. What should I put as the job code?
Or
I get errors that I am using some invalid job codes. But I got all the codes from the same sheet, why are some bad and some good?

Job codes may be obtained from SSONET Job Code List for Public Interface or from SSONET Job Code List by Occupational Family for Public Interface. You may select one of the SSONET codes from these tables that corresponds with the job you are offering.

I received an error on a job with a salary of $50,000 that said the salary can't be more than $500 per hour or $1,040,000 per year.

Check your salary unit. The salary unit of a job (per hour, per week, etc.), is encoded as an integer. The encoding is as follows:

1. Hourly
2. Daily
3. Weekly
4. Monthly
5. Yearly

Then the salary minimum and maximum are interpreted as salary per unit specified. So with a max salary of 50,000 and a salary unit of **2. Daily**, you would in effect be advertising a job that pays $13 million per year, probably not what you meant.

I want to post jobs based in other countries. How can I do that?

Find the appropriate country code in Country Codes. You must use the country codes from this table to identify countries when posting jobs.

Use the country code for the country where the job is located, then in the state field, use the code **ZZ** to indicate a non-US country. Do **not** try to enter province abbreviations, they will not work. You may enter a city, if you wish, but it is not required.

Military State codes are considered part of the US regardless of the location. Use the country code of US when using a military state code.

I want to post a job nationwide. How can I do that?

Do not include ZIP code, state, or city, and enter **US** in the Country field.

"Going Live," PI Status E-mail, Troubleshooting

I'm done testing, now what do I do?

First, be sure that you have tested your actual files. Many people go through the testing phase using small test files. While this is a good way to be sure you are providing the right format, it does not verify that the contents of your data files will pass our content checks. Your final tests, before asking to go into production, should be run on the real job/office files you would like run in production.

Once you've completed running the checks, you can follow the steps for "Production Phase" in the Quick Startup Instructions section of the PI Specification/Help Document.

Some important things to note about going into production:

- If you don't explicitly request to go into production, you are not in production.
- You should contact PI Help, to request to go into production.
- If you request to go into production and you are advised that you have too many errors to go live, you are still in testing. **You will need to con-**

tact PI Help again when you have corrected the problems and request again to go live.

- You will begin receiving **e-mail status reports** for your data files in test and production. The report states whether the submission was for test or production. If you do not receive this e-mail, your data files did not process. If you have never received this e-mail, you have not sent us a new data file.

Ok, but do I have to do anything different now that I'm in production?

First, make sure you are actually in production. To do this, check your e-mail status report that shows whether your files ran in test or production mode.

You should read your PI status e-mail when you get it, to see how your files processed. When you encounter errors, you should try to fix them as soon as possible, because those jobs that have errors will never make it into our database.

We strongly suggest that if you change something about how you generate your files, run them through the test mode on the website before the production run that night to catch errors that might prevent your file from processing. This helps eliminate nasty surprises in the next day's e-mail.

If you would like to run the test mode on your files, the PI Resources website is available if you wish to do this. However, if your files remain clean, you should not have to visit the PI Resources website again while you are in production. If you receive a “FATAL ERROR” message, please be advised that none of the jobs in the file were processed.

Why do you send me e-mail every day? What is this?

The e-mail is your PI activity reports. Every night database processing takes place, and the results for your account are e-mailed to the address specified as your PI reports e-mail. If you have sent new data files for that day's processing, you will receive status e-mail for those files.

This report includes alerts for any errors that were encountered during processing as well as a record of how many changes, adds, and deletes were

performed on your collection of jobs in our database, based on the files that you sent to us.

Wait, I'm not getting e-mail every day. What's wrong?

You will only receive e-mail if you have sent new data files to us for processing. If you are sure you have sent the files, check to see if you sent them before midnight Eastern Time. That is when we grab all the files on the FTP server for processing. If your files were not sent before midnight, those files will not process until the following day.

Also, be sure to check that your files have changed from the day before. Before we process anyone's files, we compare them to the files sent the day before, and if they are identical, we do not process them, therefore, you would not receive a report.

What do the results in the Transaction Summary section of the e-mail mean—Add, Change, Delete, No Changes?

The results mentioned in the e-mail identify what Data Exchange does with the records received in the submitted file. The records from the most recently submitted file are compared with those in the previously submitted file, and they are tagged as follows:

- Records that are in the recent file, but not in the previous file, are tagged as **ADD**;
- Records that have changed from the previous to the recent file are tagged as **CHANGE**;
- Records that are not in the recent file, but were in the previous file are tagged as **DELETE**;
- Records that are in both files that have not changed are tagged as **NO CHANGES**.

Records that are tagged as Add, Change and Delete become corresponding transactions to the AJE database.

What do the errors mentioned in the e-mail mean?

There are four types of errors that will commonly exist in a file, records rejected, threshold errors, fatal errors, and warnings. Fatal and Warning errors are clearly prefixed with the phrase FATAL ERROR or WARNING. A threshold error occurs when the number of warnings reaches the error threshold of 100 errors. These errors are caused by errors in your data file, and can be diagnosed and corrected with the help of the diagnostic tools on the PI Resources web site.

In general, fatal errors are caused by syntax errors, which is usually a problem with the file or the record format. The most common fatal errors are lack of terminating new lines at the end of a file or an unescaped double quote embedded in a text field. Fatal errors will result in your files **not** being processed for as long as your file generates fatal errors.

A warning describes a condition that causes records to be skipped for processing to continue. For example, a warning message is produced for records with non-unique Origination IDs.

Records Rejected are caused by context errors. Context errors are the result of illegal data, meaning there is a problem with the values or data types of the data. The most common errors in job files are incorrect job codes, incorrect state abbreviations, and exceeding the length of the Job Description field. The most common errors in office contact files are omission of required fields. Some fields, such as e-mail contact, are only required if contact by e-mail is selected. See conditional requirements found on the record descriptions.

Each record that contains illegal data will be skipped up to a maximum of 99 skipped records. Once processing has to drop the 100th record, processing will stop with a threshold error. You will need to keep your skipped record count below 100 records, and no fatal error, for your jobs to correctly process each night.

Most PI users accomplish this by incorporating the content checks described in the specifications document, into their export scripts. Others run a separate filtering script over their output data files before “FTPing” the files to us.

I want my PI activity reports to be e-mailed to two (or three, or five) people at my business. How do I do that?

We have found that the best way to handle this is for you to create a group mailing list at your company that includes the people who should receive PI reports. You should set up the mailing list so it is able to receive e-mail from outside your company.

A benefit of doing this is that you can send the reports to an unlimited number of people, and you may change your list of recipients whenever you wish, without having to update your information with us.

How often do you run the program that updates the database?

PI overnight processing is run every night, currently at midnight Eastern Time (9:00pm Pacific Time). Periodically, as we update the processing to accommodate new concerns and features, you may notice that the processing is done the following morning instead of that night. This is a safety measure to ensure that the first few processing runs after any new changes are supervised by the PI team, and is only temporary.

Can you run my jobs at 9:00pm (1:00am, 2:30am, etc.) instead of midnight Eastern Time?

Sorry, no. Public Interface processing is timed around other America's Job Exchange processes so we have very little leeway in scheduling runs. The current run time of midnight Eastern Time ensures that we can process the growing list of PI users in enough time that everyone's jobs will be available the following morning.
Note: Your transmission needs to be complete by midnight Eastern Time. To ensure that your job is properly processed, we strongly recommend that you do **not** send files between midnight Eastern Time (9:00pm Pacific Time) and 4:00am Eastern Time (1:00am Pacific Time).

Why aren't my jobs in the database?

Either you are still in the testing phase, or there was a fatal error in your file that prevented it from processing. Unless you have specifically requested to be moved from testing to production, chances are you are still in testing. You are not automatically put into production when your files test correctly

—you must notify PI Help when you have completed testing and would like to have your files approved for production. See Copying Production Files to Test for additional instructions.

How long does it take for the jobs to show up in the search after they are processed?

These will show up by the following morning.

The SSONet Codes are not in a usable format in the PDF document. How can I extract these codes for use in other software?

An easy way to download these codes is by using the IE browser and MS excel software. To perform this download:

1. In IE's address field type in the URL address for the table to download. For the "SSONET Job Code List for Public Interface", type www.americasjobexchange/help/employer/SSONetJobCodeList2.html. For "SSONET Job Code List by Occupational Family for Public Interface", type www.americasjobexchange.com/help/employer/SSONetJobCodeListbyCategory2.html
   Or
   For PI Employers, go to the PI Resources Main Page. (This is the page that is displayed after selecting the PI graphic from the Employer's page.) Select the Help link from the top navigation. The "Helpful Links" page will be displayed. Select either the "SSONET Job Code List for Public Interface" or the "SSONET Job Code List by Occupational Family for Public Interface" link.

2. On the SSONET codes page, move the cursor over one of the table rows and right click on the mouse. A drop-down menu that will be displayed; select "Export to Microsoft Excel" selection. The Excel program should be launched and the SSONET table from the web page should be automatically loaded into the spreadsheet. Save the spreadsheet for future use.

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Education Codes for Public Interface

Note: These Education Codes should only be used by employers using Public Interface.

You may specify the level of education as a number of years. This is preferred, as the web site only displays Education as "Equivalent Number of Years" and not as the actual degree name. This decision was made because it was the lowest common denominator for all the different forms of data that America's Job Exchange receives.

Alternatively, we allow input of degrees specified by letter. Our system will interpret the degree names you provide, and will store them in our database as their numerical equivalent in "Years of Education." If you need to specify a particular type of degree specialization, please include this information in your job description. While we do accept either format interchangeably within a job file, you may not mix letters and numbers in any one Education field.

Numerical Equivalents for Degrees/Diplomas

Beginning	Assumed to Mean	Number of Years	Converts to AJE Value
		1-11	Less than High School
H or **G**	HS, GD, GED. . .	12	High School/G.E.D.
		13	Some College
A	AS, AD. . .	14-15	Associate's Degree
B	BA, BS, BD. . .	16-17	Bachelor's Degree
M	MA, MS, MBA. . .	18-19	Master's Degree
P, **J**, or **T**	PHD, JD, THD. . .	20 or more	Doctor's Degree

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SSONET Job Code List for Public Interface

Note: These SSONET Job Codes should only be used by employers using Public Interface.

Code	Descriptions
	A
1310010	Accountants And Auditors
2920010	Actors
1510010	Actuaries
2500010	Adjudicators, Law Judges and Hearing Officers
1100010	Administrative Services Managers
1110010	Administrators of Elementary and Secondary School Education
1110020	Administrators of Postsecondary Education
1110030	Administrators of Preschool and Child Care Center/Program Education
1100020	Advertising and Promotions Managers
3100010	Advertising Sales Agents
1720010	Aerospace Engineering and Operating Technicians
1700010	Aerospace Engineers
1300010	Agents and Business Managers of Artists, Athletes and Performers
1930010	Agricultural and Food Science Technicians
1700020	Agricultural Engineers
4300010	Agricultural Graders and Sorters
4300020	Agricultural Inspectors
1100030	Agricultural Managers
2731010	Agricultural Science Teachers, Postsecondary
4300030	Agricultural Workers
5111010	Air Traffic Controllers and Dispatchers
4700010	Aircraft Mechanics and Service Technicians
4910010	Aircraft Structure, Surfaces, Rigging and Systems Assemblers

Code	Descriptions
5111030	Airfield Operations Specialists
5111040	Airline Pilots, Copilots and Flight Engineers
2300010	Alcohol and Substance Abuse Counselors
5112010	Ambulance Drivers and Attendants Except EMTs
2130010	Anesthesiologists
4300040	Animal Breeders
3500010	Animal Control Workers
1910010	Animal Scientists
4300050	Animal Trainers
2720010	Anthropology and Archaeology Teachers, Postsecondary
2500020	Arbitrators, Mediators and Conciliators
1920010	Archeologists and Anthropologists
1700030	Architects, Except Landscape and Naval
1710010	Architectural and Civil Drafters
2720020	Architecture Teachers, Postsecondary
2700010	Archivists
2720030	Area, Ethnic and Cultural Studies Teachers, Postsecondary
2900010	Art Directors
2720040	Art, Drama and Music Teachers, Postsecondary
2900020	Artists
4910120	Assemblers and Fabricators
1310020	Assessors and Appraisers
1900010	Astronomers
5500010	Athletes and Sports Competitors
2100010	Athletic Trainers
1900020	Atmospheric and Space Scientists
2731020	Atmospheric, Earth, Marine and Space Sciences Teachers, Postsecondary
2930010	Audio and Video Equipment Technicians

Code	Descriptions
2700020	Audio-Visual Collections Specialists
2100030	Audiologists
4740010	Auto Body Repairers
4740020	Auto Glass Repairers
4740030	Auto Mechanics and Service Technicians
4710010	Avionics Technicians
	B
4100010	Baggage Porters, Bellhops
3500020	Bailiffs
4920010	Bakers
4100020	Barbers
3700010	Bartenders
4700030	Bicycle Repairers
3310010	Bill and Account Collectors
3310020	Billing and Posting Clerks
4990060	Bindery Workers
1910020	Biochemists and Biophysicists
2731030	Biological Science Teachers, Postsecondary
1910030	Biological Scientists
1930020	Biological Technicians
1700040	Biomedical Engineers
4520010	Blasters and Explosives Workers
4500010	Boilermakers
4990010	Bookbinders
3310030	Bookkeeping, Accounting and Auditing Clerks
4550010	Brick Masons
5114010	Bridge, Lock, Lighthouse Tenders
2920020	Broadcast News Analysts

Code	Descriptions
2930020	Broadcast Technicians
3300010	Brokerage Clerks
1310030	Budget Analysts
3900010	Building Cleaning Workers
5112020	Bus Drivers
5112030	Bus Drivers, School
1300020	Business Operations Specialists
2720050	Business Teachers, Postsecondary
4920020	Butchers and Meat Cutters
	C
4992010	Cabinetmakers, Bench Carpenters
2900030	Camera Operators
5114020	Captains, Mates, Water Vessel Pilots
2140010	Cardiovascular Technicians
3300020	Cargo and Freight Agents
4540010	Carpenter Helpers
4500020	Carpenters
4530010	Carpet Installers
1700050	Cartographers and Photogrammetrists
3100020	Cashiers
4930010	Cementing and Gluing Machine Operators and Tenders
1700060	Chemical Engineers
4930020	Chemical Equipment Operators and Tenders
4980010	Chemical Plant and System Operators
1930030	Chemical Technicians
2731040	Chemistry Teachers, Postsecondary
1900030	Chemists
1100040	Chief Executives

Code	Descriptions
4100030	Child Care Workers
2300020	Child, Family and School Social Workers
2100040	Chiropractors
2920030	Choreographers
1720020	Civil Engineering Technicians
1700070	Civil Engineers
3300030	Claims Adjusters, Examiners and Investigators
4930030	Cleaning, Washing and Metal Pickling Equipment Operators and Tenders
2300030	Clergy
1920020	Clinical, Counseling and School Psychologists
5500020	Coaches and Scouts
4960010	Coating, Painting and Spraying Machine Setters, Operators and Tenders
4910020	Coil Winders, Tapers, Finishers
2910010	Commercial and Industrial Designers
5111050	Commercial Pilots
3300040	Communication Equipment Operators
2720060	Communications Teachers, Postsecondary
1120010	Compensation and Benefits Managers
1300030	Compensation, Benefits and Job Analysis Specialists
2500030	Compliance Officers and Enforcement Inspectors
1500010	Computer and Information Scientists, Research
1100050	Computer and Information Technology Managers
1500020	Computer Engineers, Applications Software
1500030	Computer Engineers, Systems Software
1700080	Computer Hardware Engineers
3300050	Computer Operators
1500040	Computer Programmers
2731050	Computer Science Teachers, Postsecondary

Code	Descriptions
1500050	Computer Specialists
1500060	Computer Support Specialists
1500070	Computer Systems Analysts
4710020	Computer, Automated Teller, Office Machine Repairers
4950010	Computer-Controlled Machine Tool Operators
4100040	Concierges
4550020	Concrete Finishers and Cement Masons
1910040	Conservation Scientists
4500030	Construction and Building Inspectors
1100060	Construction and Extractive Managers
4500040	Construction Laborers
4540070	Construction Trades Helpers
4500050	Construction Trades Workers
4520020	Continuous Mining Machine Operators
5100020	Conveyor Operators/Tenders
3710070	Cooks
3710010	Cooks, Chefs and Head
3710020	Cooks, Institution and Cafeteria
3710030	Cooks, Private Household
3710040	Cooks, Restaurant
3710050	Cooks, Short Order
3710060	Cooks, Specialty Fast Food
4930040	Cooling and Freezing Equipment Operators and Tenders
3500030	Correction Officers and Jailers
3300060	Correspondence Clerks
1300040	Cost Estimators
4100050	Costume Attendants
2300040	Counselors

Code	Descriptions
3100030	Counter and Rental Clerks
3700020	Counter Attendants
3300070	Couriers and Messengers
3300120	Court Reporters
3300110	Court, Municipal, License Clerks
2900040	Craft Artists
5100030	Crane and Tower Operators
1310040	Credit Analysts
3300130	Credit Authorizers and Clerks
2720070	Criminal Justice and Law Enforcement Teachers, Postsecondary
3500040	Crossing Guards
4930050	Crushing Grinding and Polishing Machine Setters, Operators and Tenders
2700030	Curators
3300140	Customer Service Representatives
4900010	Cutters and Trimmers, Hand
4930060	Cutting and Slicing Machine Setters, Operators and Tenders
4950110	Cutting, Punching and Press Machine Setters, Operators and Tenders, Metal and Plastic
	D
2920040	Dancers
1500080	Data Communications Specialists
3300150	Data Entry Clerks
1500110	Database Administrators
3100040	Demonstrators and Product Promoters
2110010	Dental Assistants
2100050	Dental Hygienists
4940010	Dental Laboratory Technicians
2120010	Dentists, General

Code	Descriptions
2120090	Dentists, Specialists
4520030	Derrick Operators, Oil and Gas
2910110	Designers
4990020	Desktop Publishing Specialists
3500050	Detectives and Criminal Investigators
2100060	Diagnostic Medical Sonographers
4740040	Diesel Mechanics and Engine Specialists
2140020	Dietetic Technicians
2100070	Dietitians and Nutritionists
3700030	Dining Room, Cafeteria, Bar Attendants
2300050	Directors, Religious Activities and Education
3700040	Dishwashers
3300160	Dispatchers
4700050	Divers
3100050	Door-to-door Sales Workers and Street Vendors
1710090	Drafters
5100040	Dredge Operators
4950120	Drilling and Boring Machine Setters, Operators and Tenders Metal and Plastic,
5112040	Drivers/Sales Workers
4500060	Drywall and Ceiling Tile Installers
	E
4520040	Earth Drillers Except Oil and Gas
2720110	Economics Teachers, Postsecondary
1920030	Economists
2940010	Editors
1110090	Education Administrators
2720120	Education Teachers, Postsecondary
2700040	Education, Training and Library Workers

Code	Descriptions
4710030	Electric Motor, Power Tools Repairers
1710020	Electrical and Electronic Drafters
1720030	Electrical and Electronic Engineering Technicians
4910030	Electrical and Electronic Equipment Assemblers
1700110	Electrical Engineers
4730010	Electrical Power-Lines Installers and Repairers
4500070	Electricians
4540020	Electricians Helpers
4910040	Electro-Mechanical Equipment Assemblers
1720040	Electro-Mechanical Technicians
1700120	Electronic Engineers, Except Computer
4710040	Electronic Home Entertainment Repairers
2700050	Elementary School Teachers
4500110	Elevator Installers and Repairers
4100060	Embalmers
1300050	Emergency Management Specialists
2140030	Emergency Medical Technicians
1300060	Employment, Recruitment and Placement Specialists
4910050	Engine and Other Machine Assemblers
1100070	Engineering Managers
2720140	Engineering Teachers, Postsecondary
1720120	Engineering Technicians
1700290	Engineers
2720130	English Language and Literature Teachers, Postsecondary
2900050	Entertainers and Performers and Sports Workers
4100070	Entertainment Attendants
1720050	Environmental Engineering Technicians
1700130	Environmental Engineers

Code	Descriptions
2731060	Environmental Science Teachers, Postsecondary
1930040	Environmental Science Technicians
1910060	Environmental Scientists
1910050	Epidemiologists
4950020	Etchers and Engravers
5100050	Excavating, Loading Machine, Dragline Operators
3330010	Executive Secretaries and Administrative Assistants
4520160	Extraction Workers
4520050	Extractive Worker Helpers
4950130	Extruding and Drawing Machine Setters, Operators and Tenders, Metal and Plastic
4991110	Extruding and Forming Machine Setters, Operators and Tenders Synthetic and Glass
4930070	Extruding, Forming, Pressing and Compacting Machine Setters, Operators and Tenders
	F
4991010	Fabric and Apparel Patternmakers
4700060	Fabric Menders
4310010	Fallers and Buckers
2130020	Family and General Practitioners
2700060	Farm and Home Management Advisors
4300060	Farm and Ranch Animal Workers
4740050	Farm Equipment Mechanics
4300070	Farm Equipment Operators
4300110	Farm Labor Contractors
4300120	Farm, Greenhouse, Nursery Workers
4300130	Farmers and Ranchers
4310020	Farming, Fishing and Forestry Workers
2910020	Fashion Designers
4500120	Fence Erectors

Code	Descriptions
4910060	Fiberglass Laminators and Fabricators
3300170	File Clerks
2900060	Film and Video Editors
1310050	Financial Analysts and Advisors
2500040	Financial Examiners
1100080	Financial Managers
1310190	Financial Specialists
2900070	Fine Artists
3500060	Fire Fighters
3500070	Fire Inspectors and Investigators
3500110	Fish and Game Wardens
4300150	Fishers and Fishing Workers
2700070	Fitness Trainers and Aerobic Instructors
4100110	Flight Attendants
4530020	Floor Layers
4530030	Floor Sanders and Finishers
2910030	Floral Designers
4920030	Food and Tobacco Machine Operators and Tenders
4920040	Food Batchmakers
4920050	Food Cooking Machine Operators and Tenders
3700050	Food Preparation and Serving Related Workers
3700060	Food Preparation and Serving Workers
3700070	Food Preparation Workers
1910070	Food Scientists
3700110	Food Servers, Non-Restaurant
1100090	Food Service Managers
2720150	Foreign Language and Literature Teachers, Postsecondary
1930050	Forensic Science Technicians

Code	Descriptions
1930060	Forest and Conservation Technicians
4310030	Forest and Conservation Workers
3500120	Forest Fire Inspectors and Prevention Specialists
1910080	Foresters
2731070	Forestry and Conservation Science Teachers, Postsecondary
4950140	Forging Machine Setters, Operators and Tenders, Metal and Plastic
4950030	Foundry Mold and Core Makers
4100120	Funeral Attendants
1300070	Funeral Directors
4930110	Furnace, Kiln, Oven, Drier and Kettle Operators and Tenders
4992020	Furniture Finishers
	G
5500030	Gaming and Sports Book Writers and Runners
5500040	Gaming Cage Workers
5500050	Gaming Change People and Booth Cashiers
5500060	Gaming Dealers
1100110	Gaming Establishment Managers
5500160	Gaming Service Workers
5500070	Gaming Supervisors
5500110	Gaming Surveillance Officers and Investigators
3900020	Gardeners and Grounds Keepers
5100060	Gas Compressor and Pumping Station Operators
4980020	Gas Plant Operators
1100120	General and Operations Managers
3300210	General Office Clerks and Administrative Workers
1920040	Geographers
2720160	Geography Teachers, Postsecondary
1930070	Geological and Petroleum Technicians

Code	Descriptions
1900040	Geoscientists
4500130	Glaziers
3300220	Government Eligibility Interviewers
2700110	Graduate Assistants, Teaching
2910040	Graphic Designers
4950150	Grinding, Lapping, Polishing and Buffing Machine Setters, Operators and Tenders, Metal and Plastic
3900030	Grounds Maintenance Workers
	H
4100130	Hairstylists, Cosmetologists
4900020	Hand Grinders and Polishers
5100070	Hand Packers and Packagers
4530040	Hard Tile Setters
4500140	Hazardous Materials Removal Workers
2100110	Health Diagnosing and Treating Practitioners
2700120	Health Educators
2720170	Health Specialties Teachers, Postsecondary
2140040	Health Technologists and Technicians
2100120	Healthcare Practitioners and Technical Workers
2100130	Healthcare Support Workers
4950160	Heat Treating Equipment Setters, Operators and Tenders, Metal and Plastic
4700070	Heating, Air Conditioning, Refrigeration Mechanics
4900030	Helpers, Production Workers
4500150	Highway Maintenance Workers
1920050	Historians
2720210	History Teachers, Postsecondary
5100110	Hoist and Winch Operators
4700110	Home Appliance Repairers

Code	Descriptions
2720220	Home Economics Teachers, Postsecondary
2110020	Home Health Aide
3300230	Hotel/Motel Desk Clerks
1120030	Human Resources Managers
1300080	Human Resources Specialists
2300060	Human Services Workers
4300160	Hunters and Trappers
1900050	Hydrologists
	I
1720060	Industrial Engineering Technicians
1700140	Industrial Engineers
1700150	Industrial Safety and Health Engineers
5112050	Industrial Truck and Tractor Operators
1920060	Industrial-Organizational Psychologists
4710050	Industrial/Commercial Electrical and Electronic Equipment Installers and Repairers
4720010	Industry Machinery Mechanics
3300240	Information and Record Clerks
4900040	Inspectors, Testers, Sorters, Samplers and Weighers
4720060	Installation, Maintenance and Repair Helpers
4720090	Installation, Maintenance and Repair Workers
2700130	Instructional Coordinators
4500160	Insulation Workers Floor, Ceiling and Wall
4500170	Insulation Workers, Mechanical
1300110	Insurance Appraisers, Auto Damage
3300250	Insurance Claims and Policy Processing Clerks
3100060	Insurance Sales Agents
1310060	Insurance Underwriters
2910050	Interior Designers

Code	Descriptions
2130030	Internists, General
2940020	Interpreters and Translators
3300260	Interviewing Clerks
	J
3900040	Janitors and Cleaners
4900050	Jewelers and Precious Stone and Metal Workers
4990030	Job Printers
2500050	Judges and Magistrates
	K
2700140	Kindergarten Teachers
	L
1700160	Landscape Architects
4950170	Lathe and Turning Machine Setters, Operators and Tenders, Metal and Plastic
4991020	Laundry and Dry Cleaning Workers
2500060	Law Clerks
2720230	Law Teachers, Postsecondary
2500070	Lawyers
4950040	Lay-Out Workers
3330020	Legal Secretaries
2500080	Legal Support Workers
2700150	Librarians
2700160	Library Assistants
2731110	Library Sciences Teachers, Postsecondary
2700170	Library Technicians
2100140	Licensed Practical and Licensed Vocational Nurses
1910150	Life Scientists
1930080	Life, Physical and Social Science Technicians

Code	Descriptions
2700210	Literacy, Remedial, Education and GED, Teachers and Instructors
1310070	Loan Counselors
3300270	Loan Interviewers and Clerks
1310080	Loan Officers
4100140	Locker and Dressing Room Attendants
4700120	Locksmiths/Safe Repairers
5113010	Locomotive Engineers
5113020	Locomotive Firers
1100130	Lodging Managers
4310040	Log Graders and Scalers
4310050	Logging Equipment Operators
4310060	Logging Workers
1300120	Logistician
	M
5100130	Machine Feeders and Offbearers
4950050	Machinists
3900060	Maids and Housekeeping Cleaners
3320010	Mail and Postal Machine Operators
4720050	Maintenance and Repair Workers
4720020	Maintenance Workers, Machinery
4100150	Makeup Artists
1300130	Management Analysts and Consultants
1100910	Managers
4100160	Manicurists and Pedicurists
5100140	Manual Laborers and Material Movers
4700130	Manufactured Building and Mobile Home Installers
1100140	Manufacturing and Production Managers
1700170	Marine Engineers and Naval Architects

Code	Descriptions
1920070	Market Research Analysts
1100150	Marketing Managers
2300070	Marriage and Family Counselors
4540030	Mason and Tile and Marble Setter Helpers
4100170	Massage Therapists
5100150	Material-Moving Workers
1700210	Materials Engineers
1900060	Materials Scientists
2731120	Mathematical Science Teachers, Postsecondary
1510020	Mathematical Scientists
1510030	Mathematical Technicians
1510040	Mathematicians
3300310	Measurers, Checkers, Samplers
4920060	Meat, Poultry and Fish Cutters and Trimmers
4700140	Mechanical Control and Valve Installers and Repairers
4700150	Mechanical Door Repairers
1710030	Mechanical Drafters
1720070	Mechanical Engineering Technicians
1700220	Mechanical Engineers
2920120	Media and Communication Equipment Workers
2920130	Media and Communication Workers
2140050	Medical and Clinical Laboratory Technicians
2140060	Medical and Clinical Laboratory Technologists
1100160	Medical and Health Service Administrators
2300080	Medical and Public Health Social Workers
4940020	Medical appliance Technicians
2110030	Medical Assistants
2100150	Medical Equipment Preparers

Code	Descriptions
4750010	Medical Equipment Repairers
2140110	Medical Records Technicians
1910120	Medical Scientists
3330030	Medical Secretaries
3300320	Medical Transcriptionists
1300140	Meeting and Convention Planners
2300110	Mental Health and Substance Abuse Social Workers
2300120	Mental Health Counselors
2910060	Merchandise Displayers and Window Trimmers
4950990	Metal Workers and Plastic Workers
4950180	Metal-Refining Furnace Operators and Tenders
1910110	Microbiologists
2730010	Middle School Special Education Teachers
2700220	Middle School Teachers
4950210	Milling and Planing Machine Setters, Operators and Tenders, Metal and Plastic
4720030	Millwrights
4520060	Mining Cutting and Channeling Machine Operators
1700230	Mining Engineers
4520070	Mining Machine Operators
4930120	Mixing and Blending Machine Setters, Operators and Tenders
4700170	Mobile Heavy Equipment Mechanics
4950060	Model Makers, Metal and Plastic
4992030	Model Makers, Wood
3100070	Models
4900070	Molders, Shapers and Casters, Except Metal and Plastic
4950220	Molding, Core Making and Casting Machine Setters, Operators and Tenders, Metal and Plastic
2900110	Motion Picture Projectionists
5112060	Motor Vehicle Operators

Code	Descriptions
4710060	Motor Vehicles, Electrical and Electronic Equipment Installers and Repairers
4700210	Motorboat Mechanics
5114030	Motorboat Operators
4740060	Motorcycles Mechanics
2900120	Multimedia Artists and Animators
4950230	Multiple Machine Tool Setters, Operators and Tenders, Metal and Plastic
2700230	Museum Technicians and Conservators
2920050	Music Directors and Composers
4750020	Musical Instrument Repairers and Tuners
2920060	Musicians and Singers
	N
1100170	Natural Sciences Managers
1500130	Network and Computer Systems Administrators
3300330	New Account Clerks
4300170	Nonfarm Animal Caretakers
1700240	Nuclear Engineers
2140120	Nuclear Medicine Technologists
4980030	Nuclear Power Reactor Operators
1930110	Nuclear Technicians
4950070	Numerical Tool and Process Control Programmer
2110040	Nursing Aides, Orderlies and Attendants
2720240	Nursing Instructors and Teachers, Postsecondary
	O
2130040	Obstetricians and Gynecologists
2500110	Occupational Health and Safety Specialists
2140130	Occupational Health and Safety Technicians
2150010	Occupational Therapists
2110050	Occupational Therapy Aides

Code	Descriptions
2110060	Occupational Therapy Assistants
3300340	Office and Administrative Support Workers
3300360	Office Machine Operators
4510010	Operating Engineers and Other Construction Equipment Operators
1500120	Operations Researchers and Analysts
4940030	Ophthalmic Laboratory Technicians
2100160	Opticians, Dispensing and Measuring
2100170	Optometrists
2120020	Oral and Maxillofacial Surgeons
3300370	Order Clerks
2120030	Orthodontists
2140140	Orthotic and Prosthetic Technicians
	P
4930130	Packaging and Filling Machine Operators and Tenders
4500210	Painters
4540040	Painters, Paperhangers, Plasters and Stucco Masons Helpers
4960030	Painters, Transportation Equipment
4960020	Painting, Coating and Decorating Workers
4930140	Paper Goods Machine Setters, Operators and Tenders
4500220	Paperhangers
2500120	Paralegal Personnel
3500130	Parking Enforcement Workers
5100160	Parking Lot Attendants
3100120	Parts Salespersons
4950080	Patternmakers, Metal and Plastic
4992040	Patternmakers, Wood
4510020	Paving, Surfacing and Tamping Equipment Operators
3310040	Payroll Clerks

Code	Descriptions
2130050	Pediatricians, General
4100210	Personal and Home Care Aides
4100220	Personal Care Workers
1310110	Personal Financial Advisors
3300410	Personnel Assistants
3900070	Pest Controllers and Assistants
3900110	Pesticide Handlers, Sprayers and Applicators
1700250	Petroleum Engineers
4980040	Petroleum Pump System Operators, Refinery Operators and Guagers
2100210	Pharmacists
2110070	Pharmacy Aides
2140150	Pharmacy Technicians
2720250	Philosophy and Religion Teachers, Postsecondary
2900130	Photographers
4750030	Photographic Equipment Repairers
4970020	Photographic Processing Machine Operators
4970010	Photographic Processing Workers
1900070	Physical Scientists
2150020	Physical Therapists
2110110	Physical Therapy Aides
2110120	Physical Therapy Assistants
2110130	Physician's Assistants
2130090	Physicians and Surgeons
1900080	Physicists
2731130	Physics Teachers, Postsecondary
4510030	Pile-Driver Operators
4500230	Pipelayers
4540050	Pipelayers, Plumbers, Pipefitters and Steamfitters Helpers

Code	Descriptions
4980090	Plant and System Operators
4550030	Plasterers and Stucco Masons
4950240	Plating and Coating Machine Setters, Operators and Tenders, Metal and Plastic
4500240	Plumbers, Pipefitters, Steamfitters
2100220	Podiatrists
3500140	Police and Sheriff's Patrol Officers
3500150	Police, Fire and Ambulance Dispatchers
2731140	Political Science Teachers, Postsecondary
1920080	Political Scientists
2720390	Postsecondary Teachers
3300420	Postal Clerks
3300430	Postal Mail Carriers
3320020	Postal Service Mail and Postal Machine Operators
1100180	Postmasters and Mail Superintendents
4950310	Pourers and Casters, Metal
4980050	Power Distributors and Dispatchers
4980060	Power Plant Operators
4710070	Powerhouse, Substation and Relay Electronic Equipment Installers and Repairers
4750090	Precision Instrument Repairers
4990040	Prepress Technicians and Workers
2700240	Preschool Teachers
2730020	Preschool, Kindergarten and Elementary Special Education Teachers
4991030	Pressers, Textile, Garment and Related Materials
4990050	Printing Machine Operators
3500160	Private Detectives and Investigators
2300130	Probation and Correctional Treatment Specialists
1700260	Procurement and Sales Engineers
3310050	Procurement Clerks

Code	Descriptions
2920070	Producers and Directors
4900130	Production Workers
3300440	Production, Planning, Expediting Clerks
3300450	Proofreaders
1100210	Property, Real Estate Managers
2120040	Prosthodontists
3500170	Protective Service Workers
3900120	Pruners
2110140	Psychiatric Aides
2140160	Psychiatric Technicians
2130060	Psychiatrists
1920110	Psychologists
2720270	Psychology Teachers, Postsecondary
2300140	Psychosocial, Community and Behavioral Specialists
2900140	Public Address System and Other Announcers
1100220	Public Relations Managers
2900150	Public Relations Specialists
5100170	Pump Operators Except Wellhead Pumpers
1300150	Purchasing Agents
1300160	Purchasing Agents and Buyers, Farm Products
1100230	Purchasing Managers
	R
2150030	Radiation Therapists
2920110	Radio and Television Announcers
4700220	Radio Mechanics
2900160	Radio Operators
2140170	Radiologic Technicians
4700230	Rail Car Repairers

Code	Descriptions
5113030	Rail Transportation Workers
5113040	Rail Yard Engineers, Dinkey Operators, Hostlers
4500250	Rail-Track Laying and Maintenance Equipment Operators
3500210	Railroad and Transit Police
5113050	Railroad Brake, Signal and Switch Operators
5113060	Railroad Conductors and Yardmasters
3100130	Real Estate Agents
3100140	Real Estate Brokers
3300460	Receptionists
2720310	Recreation and Fitness Studies, Postsecondary
5500120	Recreation and Fitness Workers
5500130	Recreation Attendants
2150040	Recreation Therapists
3500220	Recreational Protective Services Workers
4740070	Recreational Vehicle Service Technicians
4720040	Refractory Materials Repairers
5100210	Refuse/Recyclable Materials Collectors
2100230	Registered Nurses
2300150	Rehabilitation Counselors
4500260	Reinforcing Metal Workers
2300160	Religious Workers
2940030	Reporters and Correspondents
3300470	Reservation and Transportation Ticket Agents
4100240	Residential Advisors
2150050	Respiration Therapists
2140210	Respiratory Therapy Technicians
3700120	Restaurant Hosts and Hostesses
3100160	Retail Salespersons

Code	Descriptions
4700240	Riggers
4520110	Rock Splitters
4950250	Rolling Machine Setters, Operators and Tenders, Metal and Plastic
4520120	Roof Bolters
4500270	Roofers
4540060	Roofers Helpers
4520130	Rotary Drill Operators, Oil and Gas
4520140	Roustabouts, Oil and Gas
	S
5114040	Sailors and Marine Oilers
3100290	Sales
1100240	Sales Managers
3100170	Sales Representatives, Services
3100210	Sales Representatives, Technical and Scientific
3100220	Sales Representatives, Wholesale and Manufacturing
2730030	Secondary School Special Education Teachers
2700250	Secondary School Teachers
3330040	Secretaries
3100230	Securities, Commodities and Financial Services, Sales Agents
4710110	Security and Fire Alarm Installers
3500230	Security Guards
4550040	Segmental Paver
2700260	Self-Enrichment Education Teachers
4900090	Semiconductor Processors
4930150	Separating, Filtering, Clarifying, Precipitating and Still Machine Setters, Operators and Tenders
4500320	Septic Tank and Sewer Pipe Servicers
5100220	Service Station Attendants

Code	Descriptions
4520150	Service Unit Operators, Oil, Gas and Mining
2910070	Set and Exhibit Designers
4991040	Sewers, Hand
4991120	Sewing Machine Operators
4100250	Shampooers
4500330	Sheet Metal Workers
5114050	Ship Engineers
3300510	Shipping, Receiving, Traffic Clerks
4960040	Shoe and Leather Workers and Repairers
4991130	Shoe Machine Operators and Tenders
5113070	Shuttle Car Operators
4700250	Signal and Track Switch Maintainers
4100260	Skin Care Specialists
4920070	Slaughters and Meat Packers
5500140	Slot Key Workers
4700260	Small Engine Repairers
1100250	Social and Community Service Managers
1920120	Social Science Research Assistants
2731150	Social Sciences Teachers, Postsecondary
1920190	Social Scientists
2720320	Social Work Teachers, Postsecondary
2300170	Social Workers
1920130	Sociologists
2720330	Sociology Teachers, Postsecondary
1910130	Soil and Plant Scientists
2930030	Sound Engineering Technicians
2100240	Speech-Language Pathologists
4980070	Stationary Engineers and Boiler Operators

Code	Descriptions
3300520	Statistical Assistants
1510050	Statisticians
3300530	Stock Clerks
4550050	Stone Masons
4950320	Structural Metal Fabricators and Fitters
4500340	Structural Metal Workers
5113110	Subway and Streetcar Operators
5111020	Supervisors of Aircraft Cargo Handling
4500350	Supervisors of Construction and Extractve Workers
3510010	Supervisors of Correctional Officer
4310070	Supervisors of Farming, Fishing and Forestry
3510020	Supervisors of Fire Fighting and Prevention Services
3700130	Supervisors of Food Service
3900130	Supervisors of Housekeeping and Janitorial Services
3900140	Supervisors of Landscaping and Grounds Keeping
5100240	Supervisors of Manual Laborers and Material Movers
4700160	Supervisors of Mechanics, Installers and Repairers
4100230	Supervisors of Personal Service
3510030	Supervisors of Police and Detective
4900110	Supervisors of Production and Manufacturing
3510040	Supervisors of Protective Service Workers
5100320	Supervisors of Transportation, Material Moving Machine and Vehicle Operators
3100110	Supervisors, Non-Retail Sales Workers
3300350	Supervisors, Office
3100240	Supervisors, Retail Sales Workers
2130070	Surgeons
2140220	Surgical Technicians
1920140	Survey Researchers

Code	Descriptions
1720110	Surveying and Mapping Technicians
1700270	Surveyors
3300540	Switchboard and Answering Service Operators
	T
4960050	Tailors, Dressmakers, Custom Sewers
5114060	Tank Car, Truck and Ship Loaders
4500360	Tapers
2500130	Tax Examiners, Collectors and Revenue Agents
1310120	Tax Preparers
5112070	Taxi Drivers/Chauffeurs
2700310	Teachers Aides and Assistants
2700320	Teachers and Instructors
4910070	Team Assemblers
2940040	Technical Writers
4710120	Telecommunications Equipment Installers and Repairers
4730020	Telecommunications Lines Installers and Repairers
3100250	Telemarketers
3300550	Telephone Operators
3310060	Tellers
4530050	Terrazzo Workers and Finishers
4991140	Textile Bleaching and Dyeing Machine Operators and Tenders
4991150	Textile Cutting Machine Setters, Operators and Tenders
4991160	Textile Knitting and Weaving Machine Setters, Operators and Tenders
4991170	Textile Winding, Twisting and Drawing Out Machine Setters, Operators and Tenders
4960090	Textile, Apparel and Furnishings Workers
2150090	Therapists
4910110	Timing Device Assemblers, Adjusters and Calibrators
4900120	Tire Builders

Code	Descriptions
4700310	Tire Repairers and Changers
2500140	Title Examiners and Abstractors
4950330	Tool and Die Makers
4950340	Tool Grinders, Filers, Sharpeners
4100270	Tour Guides and Escorts
5112110	Tractor-Trailer/Heavy Truck Drivers
5100250	Traffic Technicians
1120020	Training and Development Managers
1300170	Training and Development Specialists
4100310	Transportation Attendants
4710130	Transportation Equipment, Electrical and Electronic Equipment Installers and Repairers
5100270	Transportation Inspectors
5100310	Transportation Workers
1100260	Transportation, Storage and Distribution Managers
3100260	Travel Agents
4100320	Travel Guides
5112120	Truck Drivers, Light/Delivery Services
	U
5500150	Umpires, Referees, Sports Officials
5100330	Underground Mine Loading Machine Operators
4960060	Upholsterers
1920150	Urban and Regional Planners
4100330	Ushers, Lobby Attendants, Ticket Takers
3300560	Utility Meter Readers
	V
5100340	Vehicle and Equipment Cleaners
4710140	Vending, Amusement Machine Repairers

Code	Descriptions
2100250	Veterinarians
4300210	Veterinary Assistants and Animal Caretakers
2140230	Veterinary Technicians
2300210	Vocational and Education Counselors
2740010	Vocational Education Teachers, Middle School
2720340	Vocational Education Teachers, Postsecondary
2740020	Vocational Education Teachers, Secondary School
	W
3700140	Waiters and Waitresses
4750040	Watchmakers
4980080	Water and Liquid Waste Treatment Plant And System Operators
4950350	Welders, Cutters, Solderers, Brazers
4950260	Welding, Soldering and Brazing Machine Setters, Operators and Tenders
5100350	Well Head Pumpers
1300180	Wholesale and Retail Buyers
4992050	Wood Sawing Machine Setters, Operators and Tenders
4992090	Woodworkers
4992060	Woodworking Machine Setters, Operators and Tenders, Except Sawing
3300570	Word Processors
2940050	Writers and Authors
	XYZ
1910140	Zoologists
	End

Country Codes

If you do not see a particular country on this list, please check for alternate names first. Then, you may wish to check the list of states and territories; perhaps the country you are looking for is a US territory. If you still cannot locate the country, please contact an AJE administrator.

Country	***Code***
A	
Afghanistan	AF
Albania	AL
Algeria	DZ
Andorra	AD
Angola	AO
Anguilla	AI
Antarctica	AQ
Antigua and Barbuda	AG
Argentina	AR
Armenia	AM
Aruba	AW
Ascension Island	AC
Australia	AU
Austria	AT
Azerbaijan	AZ
B	
Bahamas	BS
Bahrain	BH
Bangladesh	BD

Country	Code
Barbados	BB
Belarus	BY
Belgium	BE
Belize	BZ
Benin	BJ
Bermuda	BM
Bhutan	BT
Bolivia	BO
Bosnia and Herzegovina	BA
Botswana	BW
Bouvet Island	BV
Brazil	BR
British Indian Ocean Territory	IO
Brunei Darussalam	BN
Bulgaria	BG
Burkina Faso	BF
Burundi	BI
C	
Cambodia	KH
Cameroon	CM
Canada	CA
Cap Verde	CV
Cayman Islands	KY
Central African Republic	CF
Chad	TD

Country	***Code***
Chile	CL
China	CN
Christmas Island	CX
Cocos (Keeling) Islands	CC
Colombia	CO
Comoros	KM
Congo, Democratic Republic of	CD
Congo, Republic of	CG
Cook Islands	CK
Costa Rica	CR
Cote d'Ivoire (Ivory Coast)	CI
Croatia/Hrvatska	HR
Cuba	CU
Cyprus	CY
Czech Republic	CZ
D	
Denmark	DK
Djibouti	DJ
Dominica	DM
Dominican Republic	DO
E	
East Timor	TP
Ecuador	EC
Egypt	EG
El Salvador	SV

Country	Code
Equatorial Guinea	GQ
Eritrea	ER
Estonia	EE
Ethiopia	ET
F	
Falkland Islands (Malvina)	FK
Faroe Islands	FO
Fiji	FJ
Finland	FI
France	FR
French Guiana	GF
French Polynesia	PF
French Southern Territories	TF
G	
Gabon	GA
Gambia	GM
Georgia	GE
Germany	DE
Ghana	GH
Gibraltar	GI
Greece	GR
Greenland	GL
Grenada	GD
Guadeloupe	GP
Guatemala	GT

Country	Code
Guernsey	GG
Guinea	GN
Guinea-Bissau	GW
Guyana	GY
H	
Haiti	HT
Heard and McDonald Islands	HM
Holy See (City Vatican State)	VA
Honduras	HN
Hong Kong	HK
Hungary	HU
I	
Iceland	IS
India	IN
Indonesia	ID
Iran (Islamic Republic of)	IR
Iraq	IQ
Ireland	IE
Isle of Man	IM
Israel	IL
Italy	IT
J	
Jamaica	JM
Japan	JP
Jersey	JE
Jordan	JO

Country	Code
K	
Kazakhstan	KZ
Kenya	KE
Kiribati	KI
Korea (North)	KP
Korea (South)	KR
Kuwait	KW
Kyrgyzstan	KG
L	
Lao Peoples Democratic Republic	LA
Latvia	LV
Lebanon	LB
Lesotho	LS
Liberia	LR
Libyan Arab Jamahiriya	LY
Liechtenstein	LI
Lithuania	LT
Luxembourg	LU
M	
Macau	MO
Macedonia	MK
Madagascar	MG
Malawi	MW
Malaysia	MY
Maldives	MV
Mali	ML

Country	Code
Malta	MT
Martinique	MQ
Mauritania	MR
Mauritius	MU
Mayotte	YT
Mexico	MX
Moldova	MD
Monaco	MC
Mongolia	MN
Montserrat	MS
Morocco	MA
Mozambique	MZ
Myanmar	MM
N	
Namibia	NA
Nauru	NR
Nepal	NP
Netherlands	NL
Netherlands Antilles	AN
New Caledonia	NC
New Zealand	NZ
Nicaragua	NI
Niger	NE
Nigeria	NG
Niue	NU

Country	Code
Norfolk Island	NF
Norway	NO
O	
Oman	OM
P	
Pakistan	PK
Palestinian Territories	PS
Panama	PA
Papua New Guinea	PG
Paraguay	PY
Peru	PE
Philippines	PH
Pitcairn Island	PN
Poland	PL
Portugal	PT
Q	
Qatar	QA
R	
Reunion Island	RE
Romania	RO
Russian Federation	RU
Rwanda	RW
S	
Saint Helena	SH
Saint Kitts and Nevis	KN
Saint Lucia	LC

Country	Code
Saint Pierre and Miquelon	PM
Saint Vincent and the Grenadines	VC
San Marino	SM
Sao Tome and Principe	ST
Saudi Arabia	SA
Senegal	SN
Seychelles	SC
Sierra Leone	SL
Singapore	SG
Slovak Republic	SK
Slovenia	SI
Solomon Islands	SB
Somalia	SO
South Africa	ZA
South Georgia and the South Sandwich Islands	GS
Spain	ES
Sri Lanka	LK
St. Helena	SH
St. Kitts and Nevis	KN
St. Lucia	LC
St. Pierre and Miquelon	PM
St. Vincent and the Grenadines	VC
Sudan	SD
Suriname	SR

Country	Code
Svalbard and Jan Mayen Islands	SJ
Swaziland	SZ
Sweden	SE
Switzerland	CH
Syrian Arab Republic	SY
T	
Taiwan	TW
Tajikistan	TJ
Tanzania	TZ
Thailand	TH
Togo	TG
Tokelau	TK
Tonga	TO
Trinidad and Tobago	TT
Tunisia	TN
Turkey	TR
Turkmenistan	TM
Turks and Caicos Islands	TC
Tuvalu	TV
U	
Uganda	UG
Ukraine	UA
United Arab Emirates	AE
United Kingdom	UK
United States	US

Country	Code
Uruguay	UY
Uzbekistan	UZ
V	
Vanuatu	VU
Venezuela	VE
Vietnam	VN
Virgin Islands (British)	VG
W	
Wallis and Futuna Islands	WF
Western Sahara	EH
Western Samoa	WS
Y	
Yemen	YE
Yugoslavia	YU
Z	
Zambia	ZM
Zimbabwe	ZW

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SSONET Job Code List by Occupational Family for Public Interface

Note: These SSONET Job Codes should only be used by employers using Public Interface.

Occupational Family	Code	Description
ADMINISTRATIVE SUPPORT		
	1300010	Agents and Business Managers of Artists, Athletes and Performers
	1300020	Business Operations Specialists
	1300030	Compensation, Benefits and Job Analysis Specialists
	1300040	Cost Estimators
	1310040	Credit Analysts
	1300050	Emergency Management Specialists
	1300060	Employment, Recruitment and Placement Specialists
	3330010	Executive Secretaries and Administrative Assistants
	1300070	Funeral Directors
	1300080	Human Resources Specialists
	1300110	Insurance Appraisers, Auto Damage
	1310060	Insurance Underwriters
	1310070	Loan Counselors
	1310080	Loan Officers
	1300120	Logistician
	1300130	Management Analysts and Consultants
	1300140	Meeting and Convention Planners
	1300150	Purchasing Agents
	1300160	Purchasing Agents and Buyers, Farm Products
	1300170	Training and Development Specialists
	1300180	Wholesale and Retail Buyers
Financial Specialists	1310010	Accountants and Auditors
	1310020	Assessors and Appraisers
	1310030	Budget Analysts

Occupational Family	Code	Description
	1310040	Credit Analysts
	1310050	Financial Analysts and Advisors
	2500040	Financial Examiners
	1310190	Financial Specialists
	1310060	Insurance Underwriters
	1310070	Loan Counselors
	1310080	Loan Officers
	1310110	Personal Financial Advisors
	2500130	Tax Examiners, Collectors and Revenue Agents
	1310120	Tax Preparers
CLEAN AND GROUNDS MAINTENANCE		
	3900010	Building Cleaning Workers
	3900020	Gardeners and Groundskeepers
	3900030	Grounds Maintenance Workers
	3900040	Janitors and Cleaners
	3900060	Maids and Housekeeping Cleaners
	3900070	Pest Controllers and Assistants
	3900110	Pesticide Handlers, Sprayers and Applicators
	3900120	Pruners
	3900130	Supervisors of Housekeeping and Janitorial Services
	3900140	Supervisors of Landscaping and Groundskeeping
CLERICAL, SECRETARIAL AND OFFICE		
	3300010	Brokerage Clerks
	3300020	Cargo and Freight Agents
	3300030	Claims Adjusters, Examiners and Investigators
	3300040	Communication Equipment Operators
	3300050	Computer Operators
	3300060	Correspondence Clerks
	3300070	Couriers and Messengers

Occupational Family	Code	Description
	3300120	Court Reporters
	3300110	Court, Municipal, License Clerks
	3300130	Credit Authorizers and Clerks
	3300140	Customer Service Representatives
	3300150	Data Entry Clerks
	3300160	Dispatchers
	3300170	File Clerks
	3300210	General Office Clerks and Administrative Workers
	3300220	Government Eligibility Interviewers
	3300230	Hotel/motel Desk Clerks
	3300240	Information and Record Clerks
	3300250	Insurance Claims and Policy Processing Clerks
	3300260	Interviewing Clerks
	3300270	Loan Interviewers and Clerks
	3300310	Measurers, Checkers, Samplers
	3300320	Medical Transcriptionists
	3300330	New Account Clerks
	3300340	Office and Administrative Support Workers
	3300360	Office Machine Operators
	3300370	Order Clerks
	3300410	Personnel Assistants
	3300420	Postal Clerks
	3300430	Postal Mail Carriers
	3300440	Production, Planning, Expediting Clerks
	3300450	Proofreaders
	3300460	Receptionists
	3300470	Reservation and Transportation Ticket Agents
	3300510	Shipping, Receiving, Traffic Clerks
	3300520	Statistical Assistants
	3300530	Stock Clerks

Occupational Family	Code	Description
	3300350	Supervisors, Office
	3300540	Switchboard and Answering Service Operators
	3300550	Telephone Operators
	3310060	Tellers
	3300560	Utility Meter Readers
	3300570	Word Processors
Financial Clerks	3310010	Bill and Account Collectors
	3310020	Billing and Posting Clerks
	3310030	Bookkeeping, Accounting and Auditing Clerks
	5500040	Gaming Cage Workers
	3310040	Payroll Clerks
	3310050	Procurement Clerks
	3310060	Tellers
Mail and Postal Machine Operators	3320010	Mail and Postal Machine Operators
	3320020	Postal Service Mail and Postal Machine Operators
Secretaries	3330010	Executive Secretaries and Administrative Assistants
	3330020	Legal Secretaries
	3330030	Medical Secretaries
	3330040	Secretaries
COMMUNITY AND SOCIAL SERVICES		
	2300010	Alcohol and Substance Abuse Counselors
	2300020	Child, Family and School Social Workers
	2300030	Clergy
	2300040	Counselors
	2300050	Directors, Religious Activities and Education
	2700120	Health Educators
	2300060	Human Services Workers
	2300070	Marriage and Family Counselors
	2300080	Medical and Public Health Social Workers
	2300110	Mental Health and Substance Abuse Social Workers

Occupational Family	Code	Description
	2300120	Mental Health Counselors
	2300130	Probation and Correctional Treatment Specialists
	1920110	Psychologists
	2300140	Psychosocial, Community and Behavioral Specialists
	5500120	Recreation and Fitness Workers
	2300150	Rehabilitation Counselors
	2300160	Religious Workers
	4100240	Residential Advisors
	1100250	Social and Community Service Managers
	2300170	Social Workers
	1920130	Sociologists
	2300210	Vocational and Education Counselors
COMPUTER, INFORMATION TECHNOLOGY AND MATHEMATICAL		
	1500010	Computer and Information Scientists, Research
	1100050	Computer and Information Technology Managers
	1500020	Computer Engineers, Applications Software
	1500030	Computer Engineers, Systems Software
	1700080	Computer Hardware Engineers
	3300050	Computer Operators
	1500040	Computer Programmers
	1500050	Computer Specialists
	1500060	Computer Support Specialists
	1500070	Computer Systems Analysts
	1500080	Data Communications Specialists
	1500110	Database Administrators
	1500130	Network and Computer Systems Administrators
	4950070	Numerical Tool and Process Control Programmer
	1500120	Operations Researchers and Analysts
Mathematicians	1510010	Actuaries
	1510020	Mathematical Scientists

Occupational Family	Code	Description
	1510030	Mathematical Technicians
	1510040	Mathematicians
	1510050	Statisticians
CONSTRUCTION AND EXTRACTIVE		
	4500010	Boilermakers
	4500020	Carpenters
	4500030	Construction and Building Inspectors
	1100060	Construction and Extractive Managers
	4500040	Construction Laborers
	4500050	Construction Trades Workers
	4500060	Drywall and Ceiling Tile Installers
	4500070	Electricians
	4500110	Elevator Installers and Repairers
	4500120	Fence Erectors
	4500130	Glaziers
	4500140	Hazardous Materials Removal Workers
	4500150	Highway Maintenance Workers
	4500160	Insulation Workers Floor, Ceiling and Wall
	4500170	Insulation Workers, Mechanical
	4500210	Painters
	4500220	Paperhangers
	4500230	Pipelayers
	4500240	Plumbers, Pipefitters, Steamfitters
	4500250	Rail-track Laying and Maintenance Equipment Operators
	4500260	Reinforcing Metal Workers
	4500270	Roofers
	4710110	Security and Fire Alarm Installers
	4550040	Segmental Paver
	4500320	Septic Tank and Sewer Pipe Servicers
	4500330	Sheet Metal Workers

Occupational Family	Code	Description
	4500340	Structural Metal Workers
	4500350	Supervisors of Construction and Extractve Workers
	4500360	Tapers
	4530050	Terrazzo Workers and Finishers
Construction Equipment Operators	4510010	Operating Engineers and Other Construction Equipment Operators
	4510020	Paving, Surfacing and Tamping Equipment Operators
	4510030	Pile-Driver Operators
Extraction Workers	4520010	Blasters and Explosives Workers
	4520020	Continuous Mining Machine Operators
	4520030	Derrick Operators, Oil and Gas
	4520040	Earth Drillers Except Oil and Gas
	4520160	Extraction Workers
	4520050	Extractive Worker Helpers
	4520060	Mining Cutting and Channeling Machine Operators
	4520070	Mining Machine Operators
	4520110	Rock Splitters
	4520120	Roof Bolters
	4520130	Rotary Drill Operators, Oil and Gas
	4520140	Roustabouts, Oil and Gas
	4520150	Service Unit Operators, Oil, Gas and Mining
	5100330	Underground Mine Loading Machine Operators
Flooring	4530010	Carpet Installers
	4530020	Floor Layers
	4530030	Floor Sanders and Finishers
	4530040	Hard Tile Setters
	4550040	Segmental Paver
	4530050	Terrazzo Workers and Finishers
Helpers	4540010	Carpenter Helpers
	4540070	Construction Trades Helpers
	4540020	Electricians Helpers

Occupational Family	Code	Description
	4540030	Mason and Tile and Marble Setter Helpers
	4540040	Painters, Paperhangers, Plasters and Stucco Masons Helpers
	4540050	Pipelayers, Plumbers, Pipefitters and Steamfitters Helpers
	4540060	Roofers Helpers
Masons	4550010	Brick Masons
	4550020	Concrete Finishers and Cement Masons
	4550030	Plasterers and Stucco Masons
	4550040	Segmental Paver
	4550050	Stone Masons
EDUCATION AND TRAINING		
	2700010	Archivists
	2700020	Audio-Visual Collections Specialists
	2700030	Curators
	2700040	Education, Training and Library Workers
	2700050	Elementary School Teachers
	2700060	Farm And Home Management Advisors
	2700070	Fitness Trainers and Aerobic Instructors
	2700110	Graduate Assistants, Teaching
	2700120	Health Educators
	2700130	Instructional Coordinators
	2700140	Kindergarten Teachers
	2700150	Librarians
	2700160	Library Assistants
	2700170	Library Technicians
	2700210	Literacy, Remedial, Education and GED, Teachers and Instructors
	2700220	Middle School Teachers
	2700230	Museum Technicians and Conservators
	2700240	Preschool Teachers
	2700250	Secondary School Teachers
	2700260	Self-Enrichment Education Teachers

Occupational Family	Code	Description
	2700310	Teachers Aides and Assistants
	2700320	Teachers and Instructors
Education Administrators	1110010	Administrators of Elementary and Secondary School Education
	1110020	Administrators of Post Secondary Education
	1110030	Administrators of Preschool and Child Care Center/Program Education
	1110090	Education Administrators
Postsecondary Teachers	2720010	Anthropology and Archeology Teachers, Postsecondary
	2720020	Architecture Teachers, Postsecondary
	2720030	Area, Ethnic and Cultural Studies Teachers, Postsecondary
	2720040	Art, Drama and Music Teachers, Postsecondary
	2720050	Business Teachers, Postsecondary
	2720060	Communications Teachers, Postsecondary
	2731050	Computer Science Teachers, Postsecondary
	2720070	Criminal Justice and Law Enforcement Teachers, Postsecondary
	2720110	Economics Teachers, Postsecondary
	2720120	Education Teachers, Postsecondary
	2720140	Engineering Teachers, Postsecondary
	2720130	English Language and Literature Teachers, Postsecondary
	2720150	Foreign Language and Literature Teachers, Postsecondary
	2720160	Geography Teachers, Postsecondary
	2720170	Health Specialties Teachers, Postsecondary
	2720210	History Teachers, Postsecondary
	2720220	Home Economics Teachers, Postsecondary
	2720230	Law Teachers, Postsecondary
	2731110	Library Sciences Teachers, Postsecondary
	2731120	Mathematical Science Teachers, Postsecondary
	2720240	Nursing Instructors and Teachers, Postsecondary
	2720250	Philosophy and Religion Teachers, Postsecondary
	2731140	Political Science Teachers, Postsecondary

Occupational Family	Code	Description
	2720390	Post Secondary Teachers
	2720270	Psychology Teachers, Postsecondary
	2720310	Recreation and Fitness Studies, Postsecondary
	2731150	Social Sciences Teachers, Postsecondary
	2720320	Social Work Teachers, Postsecondary
	2720330	Sociology Teachers, Postsecondary
	2720340	Vocational Education Teachers, Postsecondary
Postsecondary Science Teachers	2731010	Agricultural Science Teachers, Postsecondary
	2731020	Atmospheric, Earth, Marine and Space Sciences Teachers, Postsecondary
	2731030	Biological Science Teachers, Postsecondary
	2731040	Chemistry Teachers, Postsecondary
	2731050	Computer Science Teachers, Post Secondary
	2731060	Environmental Science Teachers, Postsecondary
	2731070	Forestry and Conservation Science Teachers, Postsecondary
	2731110	Library Sciences Teachers, Postsecondary
	2731120	Mathematical Science Teachers, Postsecondary
	2731130	Physics Teachers, Postsecondary
	2731140	Political Science Teachers, Postsecondary
	2731150	Social Sciences Teachers, Postsecondary
Special Education Teachers	2730010	Middle School Special Education Teachers
	2730020	Preschool, Kindergarten and Elementary Special Education Teachers
	2730030	Secondary School Special Education Teachers
Vocational Education Teachers And Counselors	2300210	Vocational and Education Counselors
	2740010	Vocational Education Teachers, Middle School
	2720340	Vocational Education Teachers, Postsecondary
	2740020	Vocational Education Teachers, Secondary School
ENGINEERING AND ARCHITECTURAL		
	1700010	Aerospace Engineers

Occupational Family	Code	Description
	1700020	Agricultural Engineers
	1700030	Architects, Except Landscape and Naval
	1700040	Biomedical Engineers
	1700050	Cartographers and Photogrammetrists
	1700060	Chemical Engineers
	1700070	Civil Engineers
	1500020	Computer Engineers, Applications Software
	1500030	Computer Engineers, Systems Software
	1700080	Computer Hardware Engineers
	1700110	Electrical Engineers
	1700120	Electronic Engineers, Except Computer
	1100070	Engineering Managers
	1700290	Engineers
	1700130	Environmental Engineers
	1700140	Industrial Engineers
	1700150	Industrial Safety and Health Engineers
	1700160	Landscape Architects
	1700170	Marine Engineers and Naval Architects
	1700210	Materials Engineers
	1700220	Mechanical Engineers
	1700230	Mining Engineers
	1700240	Nuclear Engineers
	1700250	Petroleum Engineers
	1700260	Procurement and Sales Engineers
	1700270	Surveyors
Drafters	1710010	Architectural and Civil Drafters
	1710090	Drafters
	1710020	Electrical and Electronic Drafters
	1710030	Mechanical Drafters
Technicians	1720010	Aerospace Engineering and Operating Technicians

Occupational Family	Code	Description
	1720020	Civil Engineering Technicians
	1720030	Electrical and Electronic Engineering Technicians
	1720040	Electro-Mechanical Technicians
	1720120	Engineering Technicians
	1720050	Environmental Engineering Technicians
	1720060	Industrial Engineering Technicians
	1720070	Mechanical Engineering Technicians
	1720110	Surveying and Mapping Technicians
FARMING, FISHING AND FORESTRY		
	4300010	Agricultural Graders and Sorters
	4300020	Agricultural Inspectors
	1100030	Agricultural Managers
	4300030	Agricultural Workers
	4300040	Animal Breeders
	4300050	Animal Trainers
	1910040	Conservation Scientists
	2700060	Farm and Home Management Advisors
	4300060	Farm and Ranch Animal Workers
	4300070	Farm Equipment Operators
	4300110	Farm Labor Contractors
	4300120	Farm, Greenhouse, Nursery Workers
	4300130	Farmers and Ranchers
	4310020	Farming, Fishing and Forestry Workers
	3500110	Fish and Game Wardens
	4300150	Fishers and Fishing Workers
	4300160	Hunters and Trappers
	4300170	Nonfarm Animal Caretakers
	4310070	Supervisors of Farming, Fishing and Forestry
	4300210	Veterinary Assistants and Animal Caretakers
Forestry And Logging	1910040	Conservation Scientists

Occupational Family	Code	Description
	4310010	Fallers and Buckers
	4310020	Farming, Fishing and Forestry Workers
	1930060	Forest and Conservation Technicians
	4310030	Forest and Conservation Workers
	3500120	Forest Fire Inspectors and Prevention Specialists
	1910080	Foresters
	4310040	Log Graders and Scalers
	4310050	Logging Equipment Operators
	4310060	Logging Workers
	4310070	Supervisors of Farming, Fishing and Forestry
FOOD AND LODGING		
	4100010	Baggage Porters, Bellhops
	3700010	Bartenders
	4100040	Concierges
	3700020	Counter Attendants
	3700030	Dining Room, Cafeteria, Bar Attendants
	3700040	Dishwashers
	3700050	Food Preparation and Serving Related Workers
	3700060	Food Preparation and Serving Workers
	3700070	Food Preparation Workers
	3700110	Food Servers, Non-Restaurant
	1100090	Food Service Managers
	3300230	Hotel/Motel Desk Clerks
	3900040	Janitors and Cleaners
	1100130	Lodging Managers
	3900060	Maids and Housekeeping Cleaners
	3700120	Restaurant Hosts and Hostesses
	3700130	Supervisors of Food Service
	3900130	Supervisors of Housekeeping and Janitorial Services
	3700140	Waiters and Waitresses

Occupational Family	Code	Description
Chefs and Cooks	3710070	Cooks
	3710010	Cooks, Chefs and Head
	3710020	Cooks, Institution and Cafeteria
	3710030	Cooks, Private Household
	3710040	Cooks, Restaurant
	3710050	Cooks, Short Order
	3710060	Cooks, Specialty Fast Food
HEALTH		
	5112010	Ambulance Drivers and Attendants Except EMTs
	2100010	Athletic Trainers
	2100030	Audiologists
	2100040	Chiropractors
	2100050	Dental Hygienists
	2100060	Diagnostic Medical Sonographers
	2100070	Dietitians and Nutritionists
	2100110	Health Diagnosing and Treating Practitioners
	2700120	Health Educators
	2100120	Healthcare Practitioners and Technical Workers
	2100130	Healthcare Support Workers
	2100140	Licensed Practical and Licensed Vocational Nurses
	1100160	Medical and Health Service Administrators
	2100150	Medical Equipment Preparers
	4750010	Medical Equipment Repairers
	3330030	Medical Secretaries
	3300320	Medical Transcriptionists
	2100160	Opticians, Dispensing and Measuring
	2100170	Optometrists
	2100210	Pharmacists
	2100220	Podiatrists
	2100230	Registered Nurses

Occupational Family	Code	Description
	2100240	Speech-Language Pathologists
	2100250	Veterinarians
Aides And Assistants	2110010	Dental Assistants
	2110020	Home Health Aide
	2110030	Medical Assistants
	2110040	Nursing Aides, Orderlies and Attendants
	2110050	Occupational Therapy Aides
	2110060	Occupational Therapy Assistants
	2110070	Pharmacy Aides
	2110110	Physical Therapy Aides
	2110120	Physical Therapy Assistants
	2110130	Physician's Assistants
	2110140	Psychiatric Aides
Dentists	2120010	Dentists, General
	2120090	Dentists, Specialists
	2120020	Oral and Maxillofacial Surgeons
	2120030	Orthodontists
	2120040	Prosthodontists
Physicians and Surgeons	2130010	Anesthesiologists
	2130020	Family and General Practitioners
	2130030	Internists, General
	2130040	Obstetricians and Gynecologists
	2120020	Oral and Maxillofacial Surgeons
	2130050	Pediatricians, General
	2130090	Physicians and Surgeons
	2130060	Psychiatrists
	2130070	Surgeons
Technicians and Technologists	2140010	Cardiovascular Technicians
	4940010	Dental Laboratory Technicians
	2140020	Dietetic Technicians

Occupational Family	Code	Description
	2140030	Emergency Medical Technicians
	2140040	Health Technologists and Technicians
	2140050	Medical and Clinical Laboratory Technicians
	2140060	Medical and Clinical Laboratory Technologists
	4940020	Medical Appliance Technicians
	2140110	Medical Records Technicians
	2140120	Nuclear Medicine Technologists
	2140130	Occupational Health and Safety Technicians
	4940030	Ophthalmic Laboratory Technicians
	2140140	Orthotic and Prosthetic Technicians
	2140150	Pharmacy Technicians
	2140160	Psychiatric Technicians
	2140170	Radiologic Technicians
	2140210	Respiratory Therapy Technicians
	2140220	Surgical Technicians
	2140230	Veterinary Technicians
Therapists	4100170	Massage Therapists
	2150010	Occupational Therapists
	2150020	Physical Therapists
	2150030	Radiation Therapists
	2150040	Recreation Therapists
	2150050	Respiration Therapists
	2150090	Therapists
INSTALLATION, MAINTENANCE AND REPAIR		
	4700010	Aircraft Mechanics and Service Technicians
	4710010	Avionics Technicians
	4700030	Bicycle Repairers
	4710020	Computer, Automated Teller, Office Machine Repairers
	4700050	Divers
	4700060	Fabric Menders

Occupational Family	Code	Description
	4740050	Farm Equipment Mechanics
	4700070	Heating, Air Conditioning, Refrigeration Mechanics
	4700110	Home Appliance Repairers
	4700120	Locksmiths/Safe Repairers
	4700130	Manufactured Building and Mobile Home Installers
	4700140	Mechanical Control and Valve Installers and Repairers
	4700150	Mechanical Door Repairers
	4700170	Mobile Heavy Equipment Mechanics
	4700210	Motorboat Mechanics
	4960030	Painters, Transportation Equipment
	4700220	Radio Mechanics
	4700230	Rail Car Repairers
	4740070	Recreational Vehicle Service Technicians
	4700240	Riggers
	4700250	Signal and Track Switch Maintainers
	4700260	Small Engine Repairers
	4700160	Supervisors of Mechanics, Installers and Repairers
	4710120	Telecommunications Equipment Installers/Repairers
	4700310	Tire Repairers and Changers
	4710140	Vending, Amusement Machine Repairers
Electrical and Electronic Equipment Mechanics, Repairers and Installers	4710010	Avionics Technicians
	4710020	Computer, Automated Teller, Office Machine Repairers
	4710030	Electric Motor, Power Tools Repairers
	4710040	Electronic Home Entertainment Repairers
	4710050	Industrial/Commercial Electrical and Electronic Equipment Installers and Repairers
	4710060	Motor Vehicles, Electrical and Electronic Equipment Installers and Repairers
	4710070	Powerhouse, Substation and Relay Electronic Equipment Installers and Repairers
	4710110	Security and Fire Alarm Installers

Occupational Family	Code	Description
	4710120	Telecommunications Equipment Installers/Repairers
	4710130	Transportation Equipment, Electrical and Electronic Equipment Installers and Repairers
	4710140	Vending, Amusement Machine Repairers
Industry Machinery Mechanics, Repairers and Installers	4720010	Industry Machinery Mechanics
	4720060	Installation, Maintenance and Repair Helpers
	4720090	Installation, Maintenance and Repair Workers
	4720050	Maintenance and Repair Workers
	4720020	Maintenance Workers, Machinery
	4720030	Millwrights
	4720040	Refractory Materials Repairers
Line Installers and Repairers	4730010	Electrical Power-Lines Installers and Repairers
	4730020	Telecommunications Lines Installers and Repairers
Motor Vehicle Mechanics, Repairers and Installers	4740010	Auto Body Repairers
	4740020	Auto Glass Repairers
	4740030	Auto Mechanics and Service Technicians
	4740040	Diesel Mechanics and Engine Specialists
	4740050	Farm Equipment Mechanics
	4740060	Motorcycles Mechanics
	4960030	Painters, Transportation Equipment
	4740070	Recreational Vehicle Service Technicians
Precision Instrument and Equipment Repairers	4750010	Medical Equipment Repairers
	4750020	Musical Instrument Repairers and Tuners
	4750030	Photographic Equipment Repairers
	4750090	Precision Instrument Repairers
	4750040	Watchmakers
LEGAL AND COMPLIANCE		
	2500010	Adjudicators, Law Judges and Hearing Officers
	2500020	Arbitrators, Mediators and Conciliators
	2500030	Compliance Officers and Enforcement Inspectors

Occupational Family	Code	Description
	3300120	Court Reporters
	2500040	Financial Examiners
	2500050	Judges and Magistrates
	2500060	Law Clerks
	2500070	Lawyers
	3330020	Legal Secretaries
	2500080	Legal Support Workers
	2500110	Occupational Health and Safety Specialists
	2500120	Paralegal Personnel
	2500130	Tax Examiners, Collectors and Revenue Agents
	2500140	Title Examiners and Abstractors
MANAGEMENT		
	1100010	Administrative Services Managers
	1100020	Advertising and Promotions Managers
	1100030	Agricultural Managers
	1100040	Chief Executives
	1100050	Computer and Information Technology Managers
	1100060	Construction and Extractive Managers
	1100070	Engineering Managers
	1100080	Financial Managers
	1100090	Food Service Managers
	1100110	Gaming Establishment Managers
	1100120	General and Operations Managers
	1100130	Lodging Managers
	1100910	Managers
	1100140	Manufacturing and Production Managers
	1100150	Marketing Managers
	1100160	Medical and Health Service Administrators
	1100170	Natural Sciences Managers
	1100180	Postmasters and Mail Superintendents

Occupational Family	Code	Description
	1100210	Property, Real Estate Managers
	1100220	Public Relations Managers
	1100230	Purchasing Managers
	1100240	Sales Managers
	1100250	Social And Community Service Managers
	1100260	Transportation, Storage and Distribution Managers
Education Administrators	1110010	Administrators of Elementary and Secondary School Education
	1110020	Administrators of Post Secondary Education
	1110030	Administrators of Preschool and Child Care Center/Program Education
	1110090	Education Administrators
Human Resources	1120010	Compensation and Benefits Managers
	1120030	Human Resources Managers
	1120020	Training and Development Managers
MEDIA AND ARTS		
	1300010	Agents and Business Managers of Artists, Athletes and Performers
	2900010	Art Directors
	2900020	Artists
	2930010	Audio and Video Equipment Technicians
	2920020	Broadcast News Analysts
	2930020	Broadcast Technicians
	2900030	Camera Operators
	4100050	Costume Attendants
	2900040	Craft Artists
	2900050	Entertainers and Performers and Sports Workers
	2900060	Film and Video Editors
	2900070	Fine Artists
	4100130	Hairstylists, Cosmetologists
	2940020	Interpreters and Translators
	4100150	Makeup Artists

Occupational Family	Code	Description
	2920120	Media and Communication Equipment Workers
	2920130	Media and Communication Workers
	2910060	Merchandise Displayers and Window Trimmers
	2900110	Motion Picture Projectionists
	2900120	Multimedia Artists and Animators
	2900130	Photographers
	3300450	Proofreaders
	2900140	Public Address System and Other Announcers
	2900150	Public Relations Specialists
	2920110	Radio and Television Announcers
	2900160	Radio Operators
	2930030	Sound Engineering Technicians
Designers	2910010	Commercial and Industrial Designers
	2910110	Designers
	2910020	Fashion Designers
	2910030	Floral Designers
	2910040	Graphic Designers
	2910050	Interior Designers
	2910060	Merchandise Displayers and Window Trimmers
	2910070	Set and Exhibit Designers
Performing Arts	2920010	Actors
	2920020	Broadcast News Analysts
	2920030	Choreographers
	2920040	Dancers
	2920050	Music Directors and Composers
	2920060	Musicians and Singers
	2920070	Producers and Directors
	2920110	Radio and Television Announcers
Technicians	2930010	Audio and Video Equipment Technicians
	2930020	Broadcast Technicians

Occupational Family	Code	Description
	2930030	Sound Engineering Technicians
Writers And Editors	2940010	Editors
	5500030	Gaming and Sports Book Writers and Runners
	2940020	Interpreters and Translators
	2940030	Reporters and Correspondents
	2940040	Technical Writers
	2940050	Writers and Authors
PERSONAL SERVICES		
	4100010	Baggage Porters, Bellhops
	4100020	Barbers
	4100030	Child Care Workers
	4100040	Concierges
	3710030	Cooks, Private Household
	4100050	Costume Attendants
	4100060	Embalmers
	4100070	Entertainment Attendants
	4100110	Flight Attendants
	4100120	Funeral Attendants
	4100130	Hairstylists, Cosmetologists
	2940020	Interpreters and Translators
	4100140	Locker and Dressing Room Attendants
	4100150	Makeup Artists
	4100160	Manicurists and Pedicurists
	4100170	Massage Therapists
	4100210	Personal and Home Care Aides
	4100220	Personal Care Workers
	4100240	Residential Advisors
	4100250	Shampooers
	4100260	Skin Care Specialists
	4100230	Supervisors of Personal Service

Occupational Family	Code	Description
	4100270	Tour Guides and Escorts
	4100310	Transportation Attendants
	3100260	Travel Agents
	4100320	Travel Guides
	4100330	Ushers, Lobby Attendants, Ticket Takers
PHYSICAL, LIFE AND SOCIAL SCIENCE		
	1900010	Astronomers
	1900020	Atmospheric and Space Scientists
	1900030	Chemists
	1900040	Geoscientists
	1900050	Hydrologists
	1900060	Materials Scientists
	1100170	Natural Sciences Managers
	1900070	Physical Scientists
	1900080	Physicists
Life Scientists	1910010	Animal Scientists
	1910020	Biochemists and Biophysicists
	1910030	Biological Scientists
	1910040	Conservation Scientists
	1910060	Environmental Scientists
	1910050	Epidemiologists
	1910070	Food Scientists
	1910080	Foresters
	1910150	Life Scientists
	1910120	Medical Scientists
	1910110	Microbiologists
	1100170	Natural Sciences Managers
	1910130	Soil And Plant Scientists
	1910140	Zoologists
Social Sciences	1920010	Archeologists and Anthropologists

Occupational Family	Code	Description
	1920020	Clinical, Counseling and School Psychologists
	1920030	Economists
	1920040	Geographers
	1920050	Historians
	1920060	Industrial-Organizational Psychologists
	1920070	Market Research Analysts
	1920080	Political Scientists
	1920110	Psychologists
	1920120	Social Science Research Assistants
	1920190	Social Scientists
	1920130	Sociologists
	1920140	Survey Researchers
	1920150	Urban and Regional Planners
Technicians	1930010	Agricultural and Food Science Technicians
	1930020	Biological Technicians
	1930030	Chemical Technicians
	1930040	Environmental Science Technicians
	1930050	Forensic Science Technicians
	1930060	Forest and Conservation Technicians
	1930070	Geological and Petroleum Technicians
	1930080	Life, Physical and Social Science Technicians
	1930110	Nuclear Technicians
PRODUCTION AND MANUFACTURING		
	4900010	Cutters and Trimmers, Hand
	4950020	Etchers and Engravers
	4900020	Hand Grinders and Polishers
	4900030	Helpers, Production Workers
	4900040	Inspectors, Testers, Sorters, Samplers and Weighers
	4900050	Jewelers and Precious Stone And Metal Workers
	4900070	Molders, Shapers and Casters, Except Metal and Plastic

Occupational Family	Code	Description
	4950070	Numerical Tool and Process Control Programmer
	4900130	Production Workers
	4900090	Semiconductor Processors
	4900110	Supervisors of Production and Manufacturing
	4900120	Tire Builders
Assemblers and Fabricators	4910010	Aircraft Structure, Surfaces, Rigging And Systems Assemblers
	4910120	Assemblers and Fabricators
	4910020	Coil Winders, Tapers, Finishers
	4910030	Electrical and Electronic Equipment Assemblers
	4910040	Electro-Mechanical Equipment Assemblers
	4910050	Engine and Other Machine Assemblers
	4910060	Fiberglass Laminators and Fabricators
	4950320	Structural Metal Fabricators and Fitters
	4910070	Team Assemblers
	4910110	Timing Device Assemblers, Adjusters and Calibrators
Food Processing Workers	4920010	Bakers
	4920020	Butchers and Meat Cutters
	4920030	Food And Tobacco Machine Operators and Tenders
	4920040	Food Batchmakers
	4920050	Food Cooking Machine Operators and Tenders
	4920060	Meat, Poultry And Fish Cutters and Trimmers
	4920070	Slaughters and Meat Packers
Machine Setters, Operators and Tenders	4930010	Cementing and Gluing Machine Operators and Tenders
	4930020	Chemical Equipment Operators and Tenders
	4930030	Cleaning, Washing and Metal Pickling Equipment Operators and Tenders
	4960010	Coating, Painting and Spraying Machine Setters, Operators and Tenders
	4930040	Cooling and Freezing Equipment Operators and Tenders
	4930050	Crushing Grinding and Polishing Machine Setters, Operators and Tenders

Occupational Family	Code	Description
	4930060	Cutting and Slicing Machine Setters, Operators and Tenders
	4930070	Extruding, Forming, Pressing and Compacting Machine Setters, Operators and Tenders
	4920030	Food and Tobacco Machine Operators and Tenders
	4920050	Food Cooking Machine Operators and Tenders
	4930110	Furnace, Kiln, Oven, Drier and Kettle Operators and Tenders
	1100140	Manufacturing and Production Managers
	4930120	Mixing and Blending Machine Setters, Operators and Tenders
	4930130	Packaging and Filling Machine Operators and Tenders
	4930140	Paper Goods Machine Setters, Operators and Tenders
	4970020	Photographic Processing Machine Operators
	4990050	Printing Machine Operators
	4930150	Separating, Filtering, Clarifying, Precipitating and Still Machine Setters, Operators and Tenders
Machine Setters, Operators and Tenders, Metal and Plastic	4950110	Cutting, Punching and Press Machine Setters, Operators and Tenders, Metal and Plastic
	4950120	Drilling and Boring Machine Setters, Operators and Tenders, Metal and Plastic
	4950130	Extruding and Drawing Machine Setters, Operators and Tenders, Metal and Plastic
	4950140	Forging Machine Setters, Operators and Tenders, Metal and Plastic
	4950150	Grinding, Lapping, Polishing and Buffing Machine Setters, Operators and Tenders, Metal and Plastic
	4950160	Heat Treating Equipment Setters, Operators And Tenders, Metal and Plastic
	4950170	Lathe and Turning Machine Setters, Operators and Tenders, Metal and Plastic
	4950180	Metal-Refining Furnace Operators and Tenders
	4950210	Milling and Planing Machine Setters, Operators and Tenders, Metal and Plastic
	4950220	Molding, Core Making and Casting Machine Setters, Operators and Tenders, Metal and Plastic
	4950230	Multiple Machine Tool Setters, Operators and Tenders,

Occupational Family	Code	Description
	4950240	Plating And Coating Machine Setters, Operators and Tenders, Metal and Plastic
	4950250	Rolling Machine Setters, Operators and Tenders, Metal and Plastic
	4950260	Welding, Soldering and Brazing Machine Setters, Operators and Tenders
Machine Setters, Operators and Tenders, Textiles, Apparel and Furnishings	4991110	Extruding and Forming Machine Setters, Operators and Tenders Synthetic and Glass
	4991120	Sewing Machine Operators
	4991130	Shoe Machine Operators and Tenders
	4991140	Textile Bleaching and Dyeing Machine Operators and Tenders
	4991150	Textile Cutting Machine Setters, Operators and Tenders
	4991160	Textile Knitting and Weaving Machine Setters, Operators and Tenders
	4991170	Textile Winding, Twisting and Drawing Out Machine Setters, Operators and Tenders
Machine Setters, Operators And Tenders, Woodworking	4992050	Wood Sawing Machine Setters, Operators and Tenders
	4992060	Woodworking Machine Setters, Operators and Tenders, Except Sawing
Medical, Dental And Opthalmic Lab Technicians	4940010	Dental Laboratory Technicians
	4940020	Medical Appliance Technicians
	4940030	Ophthalmic Laboratory Technicians
Metal And Plastic Workers	4950010	Computer-Controlled Machine Tool Operators
	4950020	Etchers and Engravers
	4950030	Foundry Mold and Core Makers
	4950040	Lay-Out Workers
	4950050	Machinists
	4950990	Metal Workers and Plastic Workers
	4950060	Model Makers, Metal and Plastic
	4950070	Numerical Tool and Process Control Programmer
	4950080	Patternmakers, Metal and Plastic
	4950310	Pourers and Casters, Metal
	4950320	Structural Metal Fabricators and Fitters

Occupational Family	Code	Description
	4950330	Tool and Die Makers
	4950340	Tool Grinders, Filers, Sharpeners
	4950350	Welders, Cutters, Solderers, Brazers
Painting	4960010	Coating, Painting and Spraying Machine Setters, Operators and Tenders
	4960030	Painters, Transportation Equipment
	4960020	Painting, Coating and Decorating Workers
Photography	4970020	Photographic Processing Machine Operators
	4970010	Photographic Processing Workers
Plant And System Operators	4980010	Chemical Plant and System Operators
	4980020	Gas Plant Operators
	4980030	Nuclear Power Reactor Operators
	4980040	Petroleum Pump System Operators, Refinery Operators and Gaugers
	4980090	Plant and System Operators
	4980050	Power Distributors and Dispatchers
	4980060	Power Plant Operators
	4980070	Stationary Engineers and Boiler Operators
	4980080	Water And Liquid Waste Treatment Plant and System Operators
Printing	4990060	Bindery Workers
	4990010	Bookbinders
	4990020	Desktop Publishing Specialists
	4990030	Job Printers
	4990040	Prepress Technicians and Workers
	4990050	Printing Machine Operators
Textiles, Apparel and Furnishings	4991010	Fabric and Apparel Patternmakers
	4991020	Laundry and Dry Cleaning Workers
	4991030	Pressers, Textile, Garment and Related Materials
	4991040	Sewers, Hand
	4991120	Sewing Machine Operators
	4960040	Shoe and Leather Workers and Repairers

Occupational Family	Code	Description
	4991130	Shoe Machine Operators and Tenders
	4960050	Tailors, Dressmakers, Custom Sewers
	4960090	Textile, Apparel and Furnishings Workers
	4960060	Upholsterers
Textiles, Apparel and Furnishings Machine Setters, Operators And Tenders	4991110	Extruding and Forming Machine Setters, Operators and Tenders Synthetic and Glass
	4991120	Sewing Machine Operators
	4991130	Shoe Machine Operators and Tenders
	4991140	Textile Bleaching and Dyeing Machine Operators and Tenders
	4991150	Textile Cutting Machine Setters, Operators and Tenders
	4991160	Textile Knitting and Weaving Machine Setters, Operators and Tenders
	4991170	Textile Winding, Twisting and Drawing Out Machine Setters, Operators and Tenders
Woodworking	4992010	Cabinetmakers, Bench Carpenters
	4992020	Furniture Finishers
	4992030	Model Makers, Wood
	4992040	Patternmakers, Wood
	4992050	Wood Sawing Machine Setters, Operators and Tenders
	4992090	Woodworkers
	4992060	Woodworking Machine Setters, Operators and Tenders, Except Sawing
PROTECTIVE SERVICES		
	3500010	Animal Control Workers
	3500020	Bailiffs
	3500030	Correction Officers and Jailers
	3500040	Crossing Guards
	3500050	Detectives and Criminal Investigators
	3500060	Fire Fighters
	3500070	Fire Inspectors and Investigators
	3500110	Fish and Game Wardens

Occupational Family	Code	Description
	3500120	Forest Fire Inspectors and Prevention Specialists
	5500110	Gaming Surveillance Officers and Investigators
	3500130	Parking Enforcement Workers
	3500140	Police and Sheriff's Patrol Officers
	3500150	Police, Fire and Ambulance Dispatchers
	3500160	Private Detectives and Investigators
	3500170	Protective Service Workers
	3500210	Railroad and Transit Police
	3500220	Recreational Protective Services Workers
	3500230	Security Guards
Supervisors	3510010	Supervisors of Correctional Officer
	3510020	Supervisors of Fire Fighting and Prevention Services
	3510030	Supervisors of Police and Detective
	3510040	Supervisors of Protective Service Workers
SALES		
	1100020	Advertising and Promotions Managers
	3100010	Advertising Sales Agents
	3100020	Cashiers
	3100030	Counter and Rental Clerks
	3100040	Demonstrators and Product Promoters
	3100050	Door-to-Door Sales Workers and Street Vendors
	5112040	Drivers/Sales Workers
	5500050	Gaming Change People and Booth Cashiers
	3100060	Insurance Sales Agents
	1100150	Marketing Managers
	3100070	Models
	3100120	Parts Salespersons
	1700260	Procurement and Sales Engineers
	2900150	Public Relations Specialists
	3100130	Real Estate Agents

Occupational Family	Code	Description
	3100140	Real Estate Brokers
	3100160	Retail Salespersons
	3100290	Sales
	1100240	Sales Managers
	3100170	Sales Representatives, Services
	3100210	Sales Representatives, Technical and Scientific
	3100220	Sales Representatives, Wholesale and Manufacturing
	3100230	Securities, Commodities and Financial Services, Sales Agents
	3100110	Supervisors, Non-Retail Sales Workers
	3100240	Supervisors, Retail Sales Workers
	3100250	Telemarketers
	3100260	Travel Agents
SPORTS AND RECREATION		
	1300010	Agents and Business Managers of Artists, Athletes and Performers
	5500010	Athletes and Sports Competitors
	5500020	Coaches and Scouts
	2700070	Fitness Trainers and Aerobic Instructors
	5500030	Gaming and Sports Book Writers and Runners
	5500040	Gaming Cage Workers
	5500050	Gaming Change People and Booth Cashiers
	5500060	Gaming Dealers
	1100110	Gaming Establishment Managers
	5500160	Gaming Service Workers
	5500070	Gaming Supervisors
	5500110	Gaming Surveillance Officers and Investigators
	5500120	Recreation and Fitness Workers
	5500130	Recreation Attendants
	5500140	Slot Key Workers
	5500150	Umpires, Referees, Sports Officials

Occupational Family	Code	Description
TRANSPORTATION AND MATERIAL MOVING		
Transportation	5114010	Bridge, Lock, Lighthouse Tenders
	5100020	Conveyor Operators/Tenders
	5100030	Crane and Tower Operators
	5100040	Dredge Operators
	5100050	Excavating, Loading Machine, Dragline Operators
	5100060	Gas Compressor and Pumping Station Operators
	5100070	Hand Packers and Packagers
	5100110	Hoist and Winch Operators
	5112050	Industrial Truck and Tractor Operators
	5100130	Machine Feeders and Offbearers
	5100140	Manual Laborers and Material Movers
	5100150	Material-Moving Workers
	5100160	Parking Lot Attendants
	5100170	Pump Operators Except Wellhead Pumpers
	5100210	Refuse/Recyclable Materials Collectors
	5100220	Service Station Attendants
	5113070	Shuttle Car Operators
	5100240	Supervisors of Manual Laborers and Material Movers
	5100320	Supervisors of Transportation, Material Moving Machine and Vehicle Operators
	5114060	Tank Car, Truck And Ship Loaders
	5100250	Traffic Technicians
	4100310	Transportation Attendants
	5100270	Transportation Inspectors
	5100310	Transportation Workers
	1100260	Transportation, Storage and Distribution Managers
	5100330	Underground Mine Loading Machine Operators
	5100340	Vehicle and Equipment Cleaners
	5100350	Well Head Pumpers

Occupational Family	Code	Description
Air Transportation	5111010	Air Traffic Controllers and Dispatchers
	5111030	Airfield Operations Specialists
	5111040	Airline Pilots, Copilots and Flight Engineers
	5111050	Commercial Pilots
	5111020	Supervisors of Aircraft Cargo Handling
Bus Truck and Motor Vehicle	5112010	Ambulance Drivers and Attendants Except EMTs
	5112020	Bus Drivers
	5112030	Bus Drivers, School
	5112040	Drivers/Sales Workers
	5112050	Industrial Truck and Tractor Operators
	5112060	Motor Vehicle Operators
	5112070	Taxi Drivers/Chauffeurs
	5112110	Tractor-Trailer/Heavy Truck Drivers
	5112120	Truck Drivers, Light/Delivery Services
Rail	5113010	Locomotive Engineers
	5113020	Locomotive Firers
	5113030	Rail Transportation Workers
	5113040	Rail Yard Engineers, Dinkey Operators, Hostlers
	5113050	Railroad Brake, Signal and Switch Operators
	5113060	Railroad Conductors and Yardmasters
	5113070	Shuttle Car Operators
	5113110	Subway and Streetcar Operators
Water	5114010	Bridge, Lock, Lighthouse Tenders
	5114020	Captains, Mates, Water Vessel Pilots
	5114030	Motorboat Operators
	5114040	Sailors and Marine Oilers
	5114050	Ship Engineers
	5114060	Tank Car, Truck and Ship Loaders

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State and Territory Codes for Public Interface

Note: These State and Territory Codes should only be used by employers using Public Interface. There are 60 codes: 50 states, 9 territories/districts, and 1 special code (ZZ). When you specify a country other than the U.S., use the special code ZZ to indicate a lack of state.

State/Territory Name	Code
Alabama	AL
Alaska	AK
American Samoa	AS
Arizona	AZ
Arkansas	AR
A.F. Africa, Can, EU, MidEast	AE
A.F. Americas (Except CAN)	AA
A.F. Pacific	AP
California	CA
Colorado	CO
Connecticut	CT
Delaware	DE
District of Columbia	DC
Fed. States of Micronesia	FM
Florida	FL
Georgia	GA
Guam	GU
Hawaii	HI
Idaho	ID
Illinois	IL
Indiana	IN
Iowa	IA

State/Territory Name	Code
Kansas	KS
Kentucky	KY
Louisiana	LA
Maine	ME
Marshall Islands	MH
Maryland	MD
Massachusetts	MA
Michigan	MI
Minnesota	MN
Mississippi	MS
Missouri	MO
Montana	MT
Nebraska	NE
Nevada	NV
New Hampshire	NH
New Jersey	NJ
New Mexico	NM
New York	NY
North Carolina	NC
North Dakota	ND
Northern Mariana Islands	MP
Ohio	OH
Oklahoma	OK
Oregon	OR
Palau	PW
Pennsylvania	PA
Puerto Rico	PR

State/Territory Name	Code
Rhode Island	RI
South Carolina	SC
South Dakota	SD
Tennessee	TN
Texas	TX
Utah	UT
U.S. Virgin Islands	VI
Vermont	VT
Virginia	VA
Washington	WA
West Virginia	WV
Wisconsin	WI
Wyoming	WY
Outside U.S.	ZZ

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Sample PI Job File

"JobId1","OfficeId1","1500040","Job
Title","Street1","Street2","Syracuse","NY","13210","US","","1","5.00","6.00","License","Tr
aining","2","HS","1","40","1","1","Description"

"JobId2","SyracuseStaffing1","1500040","Computer Programmer","","","Syra-
cuse","NY","13212","US","","4","1200","13000","","","24","16","3","40","1","0","Looking
for a real techie. Could it be __YOU__?
Must have _at least_ 2 years experience with object oriented design.

Duties will include:

 * Sleeping on keyboard
 * Fabricating \"innovative\" solutions to mind-numbing problems
 * Advanced blindfolded coffee-making

Benefits offered include:

 * Medical
 * Dental
 * Flexible hours
 * Two weeks vacation

\"Come work with us!\""

"JobId3","NewYorkStaffing3","2910040","Graphic Artist","","","New
York","NY","10010","US","","4","1200","13030","","","5","24","2","40","3","0","Must have
2 years experience with Adobe Photoshop."

"JobId4","NewYorkStaffing3","1300120","Senior Logistician","","","New
York","NY","10010","US","","4","1200","13030","New York Logistician License","Genuine
Official Logistician Training Certificate","5","18","1","40","3","0","Head up our Logistics
Dept. Must be willing to relocate."

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Sample PI Office File

"OfficeId1","63","Our Company Name","570 Malden Plaza","Suite 106","Mattydale","NY","13201","US","Jamie Young","(315)454-0000x234","Jamie Young","(315)454-0000","Jamie Young","Jamie_Young@OurCompany.com","http://www.ourcompany.com/","http://www.ourcompany.com/about_our_company.html"

"SyracuseStaffing1","62","Our Company Name","","","","","","","","(315)454-0000x234","Terry White","(315)454-0000","Terry White","Terry_White@OurCompany.com","http://www.ourcompany.com/","http://www.ourcompany.com/about_our_company.html"

"NewYorkStaffing3","24","Our Company Name","","","","","","","","","","","","","Pat_Smith@OurCompany.com","http://www.ourcompany.com/",""

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